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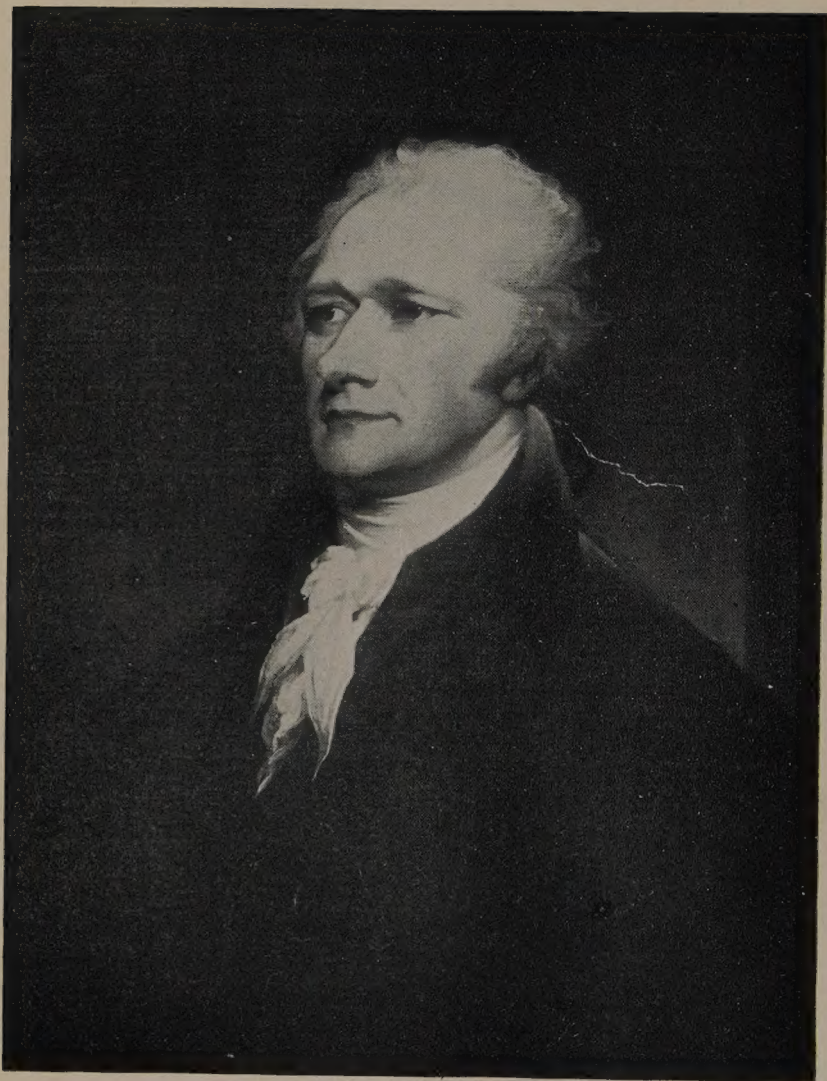
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ALEXANDER HAMILTON

(Based upon a painting by Trumbull made in 1792.)

Industrial and Commercial
Correspondence
of
Alexander Hamilton

Anticipating His Report
on Manufactures

Edited by
Arthur Harrison Cole, Ph.D.
Harvard University

With a preface by
Professor Edwin F. Gay

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Preface

This is the first publication of documents undertaken by the Business Historical Society should be this edition of letters and reports to Alexander Hamilton on the state of industry in the United States at the beginning of our national history. As throwing light on the activities of the most interesting and important figure in the economic history of the new nation, the founder of our economic policy, and as illustrating the industrial and commercial conditions of his time, Hamilton's papers, now deposited in the Library of Congress, merit publication. The Business Historical Society was well-advised by Professor Cole to select, for its initial volume, this set of documents.

All that remains of the materials which Hamilton gathered for his notable "Report on Manufactures" is here printed, almost without exception for the first time. The "Report" itself is appended, together with a discriminating analysis by the editor, which admirably supplements his general introduction. It has seemed also advisable to make accessible the other papers of business interest contained in the Hamilton correspondence. These give new information on the opening of American trade in the Far East and on Hamilton's plan for a great industrial enterprise at Paterson, New Jersey. Development in both these directions, the furtherance of home industry and the access to wider foreign markets, were recognized by Hamilton and his contemporaries as necessary economic accompaniments of the newly-won political independence. These letters depict the situation confronting American business men when they found themselves freed from the trammels but also without the protection of the English colonial system.

I may be permitted, both as a member of the Business Historical Society and as a student of economic history, not only to welcome this volume, so competently edited by Professor Cole, but to commend earnestly the purpose of the Society. Business documents, of even more significance to the future historian than these here published, are every year destroyed. Their preservation not only in the national archives but by state historical societies and university libraries is of the utmost

consequence. The present holocaust of valuable historical material can be checked only by the arousing of public interest and by that national co-operation between business men and scholars which is the aim of the Business Historical Society. This book, therefore, issued under such auspices, is a symbol both of the Society's reverence for the past and of its forethought for future generations.

EDWIN F. GAY.

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Introduction

STUDENTS of business and of economic history are always eager to tap the ultimate sources of information concerning the industry or time-period with which they happen to be dealing. To be sure, even such material—letters, business documents, descriptions by contemporaries, and the like—are subject to many inaccuracies and liable to erroneous interpretation. Possibly, as Fontanelle so cynically remarked, history of any sort is but a fable upon which men have agreed. Nevertheless, our only hope of securing a fair and just evaluation of the past is by penetrating as far as possible into the intimate details of conditions as they then existed, absorbing the material as it appears in the writings of the participants—not as perhaps garbled by some prejudiced or unscientific intermediary—and then constructing a story as conformable to the known facts as we can devise.

As an aid in this endeavor, I have brought together the following sheaf of letters. These are practically all the letters of an industrial and commercial flavor, that remain to us of the correspondence in which Alexander Hamilton was involved—and the exceptions, as will appear shortly, are of minor importance to the general student. These letters have lain for a hundred and twenty-five years unavailable to most investigators, in the collection of Hamilton Papers now preserved in the Library of Congress, Washington, D.C. Occasionally a zealous, conveniently located, or financially able student has sought them out, but for most of us they have existed only as a name. And yet they are documents of first-rate importance to a thorough-going study of American economic development. The letters herewith reproduced are in the main closely related to Hamilton's Report on Manufactures, that remarkable treatise written by Hamilton in 1791, to which every one engaged upon research into the growth of any of our older industries turns at some time. Accordingly, we should take special note of the origin and character of that document. As Secretary of the Treasury, he was called upon by the House of Representatives for data upon the manufactures of the country and "the means of promoting such as will tend to render the United States

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independent of foreign nations for military and other essential supplies". His reply was epochal, despite the fact that it was composed at a time when he was engaged upon such varied tasks as re-establishing the financial credit of the new nation, creating a coinage system out of his own imaginings, and outlining a plan for a central bank. The Report was epochal because it gave the first important impetus to that policy of protection which with increasing force has since that time dominated the tariff-making of this country, and because, breathing new vigor into the moribund system of restriction and government interference, it marks the first revolt from the free-trade doctrines of Adam Smith which were already beginning to pervade English thought. It signaled the self-assertion of a new-sprung but purposeful country—possibly an appeal to expediency rather than long-run verities, but still an appeal not unbecoming the nation as it then found itself. Because of its historical importance, the Report is well deserving of re-publication.

But the document is significant to the economic historian in another way: it contains the first attempt ever made to survey the industrial resources and activities of the United States. For this reason the investigator, whether concerned with the early cotton manufacture or the beginnings of "fossil coal" production in this country, searches the pages of this Report for any data that it may hold. All too meagre often is the information that he acquires, even though he squeeze the paragraphs or phrases for every suggestion that they can be made to convey. Too often a generalization of "considerable supply" or "interesting extent" comes to dull the sharpness of outline which one seeks and he is repeatedly tempted to inquire: just what does Hamilton mean? At other points it seems that Hamilton must have had a substantial amount of information before he could draw conclusions as sweeping as those he offers; and frequently we find ourselves asking: just how did he arrive at that opinion?

In some measure the answers to these queries are to be found in the documents which I present below. In so far as now exists, here is the evidence that Hamilton utilized: this is how he came to such and such conclusions. By examination of these data, we can extend as in no other way the survey of

American industry as of 1790 which Hamilton so courageously attempted. For such reasons, these letters to Hamilton are well worth putting into usable form.

But the letters are of absorbing interest in themselves. First of all, they are quaint and delightfully human. Spelling, for example, was still an art and not a science, for we read that country people made "there corse wairing aparel" in the "domystic" way, and that "particular valuations" as to the amount of household production would be "Intirely matter of Gess". Again, local pride not infrequently raises its head. Leffingwell extols Norwich, Connecticut, as an exceptional place for manufactures "on a large Scale"; Walker boasts of the "fine Mill seats" in South Carolina; and Davenport, of Stamford, Connecticut, cognizant of the cotton-manufacturing venture at Paterson in which Hamilton was personally involved, makes the pertinent inquiry: why should New Jersey be preferred to the excellent Connecticut? Finally, not without the human touch also is a postscript following on John Mix's description of his button factory at New Haven, Connecticut, in which he suggests his willingness to accept a government contract: he would "Furnish [buttons] at a very reasonable rate, and would Put U S A on Each Button or any other figure or Divise that Should be required."

On the whole, however, the letters are noteworthy for the high level of tone in which they are couched, and the great frankness with which the writers express themselves to the Secretary of the Treasury. While these results in large measure flow from the known sympathy of Hamilton for domestic manufactures and from a keen appreciation of his ability—the latter of which is indicated by the obsequious, though involved tribute at the close of Nathaniel Hazard's letter—they are also in part attributable to the method by which Hamilton sought the information. A certain amount of the data, to be sure, was secured by direct inquiry—as is evidenced by the correspondence from such men as George Cabot and Nathaniel Gorham, persons already known to Hamilton; but most of the information was derived through the local agents and representatives of the Treasury Department. Collectors of the customs and surveyors of the ports had been set up by the Act of July 1789 in which provision was made for the administra-

tion of the new customs law; and a system of supervisors and inspectors had been erected by an Act of March 1791 for the collection of the internal revenue duties just imposed—a supervisor overseeing each state and an inspector covering, under the eye of a supervisor, a smaller district within the larger states. To the collectors and supervisors Hamilton seems to have directed a circular letter—although no copy remains—and they in turn made inquiry of the officials under them or to others who would be familiar with conditions in the several localities.

From a similarity of phrasing in various items of the attached correspondence—as, for example, the letters of Huntington to Chester and of Moses Brown to Dexter—it appears that Hamilton's original letter, dated June 22, 1791, surely contained inquiries as to the "Manufactures of Consequence" in the particular area and as to any "Impediments and Encouragements" by which the growth of manufactures in such districts was checked or facilitated. Beyond this we cannot be sure, though possibly there was a question upon the degree to which importations affected the position and fortunes of local manufacturing activities.

The supervisors in turn, as just suggested, passed the inquiries along to inspectors or to others. In Virginia, inspectors such as Thomas Newton, Jr., or Drury Ragsdale, transmitted information to Edward Carrington, supervisor, and he forthwith handed it on to Hamilton. Elsewhere, effort was made by the supervisors to reach men who would be specially well-informed upon the subject of manufactures in the several counties or other districts of their respective states. Daniel Stevens of Charleston, South Carolina, sent a circular letter "to the most leading Characters throughout the State"; Aaron Dunham of Trenton, New Jersey, wrote to "such Gentlemen in the Different parts of this State" as he thought would be likely to provide him with the desired information; while John Chester of Wethersfield, Connecticut, not only corresponded with similar gentlemen in that state, but, following what seems to have been a happy concept, wrote to each member of the Governor's Council, the upper house of the state legislature. Finally, the manufacturers of at least two cities, Providence, Rhode Island and Charleston, South Carolina, were moved to

take common action, probably not without some encouragement from the local supervisors; and we have reports upon the divers industries of Providence and upon the leather manufactures of Charleston, done by committees of the interested producers.

In the course of these manifold inquiries, only one difficulty seems to have arisen except the one which might naturally be expected, the occasional failure of individuals to respond. In Virginia, the employment of the revenue officers stirred up people in at least one district of the state. Mr. Anselm Bailey of Surrey County in southeastern Virginia reports that "most of the people in these parts have got into such a spirit of Jealousy that they suspect some design unfavorable to them in everything that is attempted of a public nature. 'What! are they going to Tax our Cloath too' was the reply of several." This evidence of hostility to internal revenue imposts is of much interest, especially in view of the "whisky insurrection" that came a few years later in an area somewhat similarly circumstanced.

For the most part, however, the inquiries were met with a hearty spirit of co-operation. Not only are there repeated expressions of hope that the information transmitted may be satisfying to "the Secretary," but individuals unburdened their minds in an exceedingly candid manner. Moses Brown of Providence went into exceptional detail as to his experiences in the cotton manufacture. Indeed, one may say of this particular letter that it contains a more complete account of his early difficulties than elsewhere exists. Similarly Elisha Colt described the troubles of the Hartford woolen mill, the earliest woolen-cloth factory erected in this country; George Cabot, his experiences at the Beverly Cotton Manufactory; and John Mix, his efforts to establish the manufacture of metal buttons at New Haven, Connecticut. Again, various producers went to the trouble of transmitting samples of their manufactures, buttons, saddle cloth, silk lace from Ipswich, Massachusetts, woolen cloths from the Hartford mill, and the like. Unfortunately for the present-day investigator, almost all of these specimens of eighteenth-century handiwork have been lost. Only a few pieces of the Ipswich lace remain. Finally, correspondents not infrequently rose from the specific to the general,

pouring out to "the Secretary" their impressions concerning the broader features of the situation. For example, Edward Carrington's report to Hamilton contains an extraordinarily good survey of economic conditions in the whole of Virginia as of about 1790. I know of none better, none which so well considers the several natural divisions of the state, their varying economic interests and activities, and the reasons for such diversities. Again, Peter Colt called attention to one of the evils particularly potent at the time when refunding in full by the Federal Government of its outstanding debt had given impetus to a host of speculative ventures, asserting that manufactures would be most promoted and extended "when the active Stock of the Citizens shall no longer be embarked in paper Speculations." And there is some significance as well as humor in Nathaniel Gorham's glowing description of the fortunate state of this country as he saw it in 1791: the check to importations of textiles with "other concurring causes has rendered the People of this Country at the present moment the happiest on the face of the Earth—& so far as I can recollect history, does not furnish any instance of a people equally happy—in short I believe it is not in the case of Human nature to be exceeded— & the People seem sensible of it—all uneasiness and murmuring being at an end— & good humour & chearfullness universally prevailing."¹

For the general student, however, there are additional treasures to be mined from these letters. One feature which is common to many of them is the desire to nurture domestic industries—a desire which seemingly attached to industries of all sorts and did not balk at any cost. Of course such an attitude might be expected of individuals committed to particular branches of manufacture; but the spirit is not confined to them. Already there was a widespread notion that somehow imports were undesirable and even distinctly harmful—an idea that was indicated also by the societies for promoting domestic in-

¹ Perhaps not without connection with Mr. Gorham's optimistic frame of mind is the fact that he was at the time engaged in a grandiose land speculation which in 1791 seemed to be prospering well. He, with others, had purchased from the state of Massachusetts all her western lands and was then arranging for their distribution. Unfortunately for him and his associates, who included Robert Morris, the venture did not prosper as well as he had anticipated and he died in 1796 leaving no considerable fortune.

dustry, which were now increasing in numbers. Mr. Learned of New London, Connecticut, quoted manufacturers as holding that the tariff duties on saddles were not high enough; John Mix, above mentioned, desired the importation of buttons to be prohibited; and Samuel Breck of Boston wrote Hamilton with obvious satisfaction that the state bounty on hemp would, he presumed, "render our dependence on Russia much less, & probably in a few years annihilate that Commerce." Mr. Benjamin Huntington, a member of the Governor's Council in Connecticut, refers to the advantage of producing as much as possible at home; and Mr. Peter Colt, a merchant, intimates his hope that "this Country [may be] freed from a disgracefull dependance on Europe for their ordinary Cloathing." With all such views it is interesting to contrast the relatively moderate attitude taken by Hamilton himself when he came to compose his Report on Manufactures.

Furthermore, the letters teem with data upon the difficulties with which the early manufacturers were confronted. Some of these are such as might readily be expected under the circumstances. Mr. John Treadwell of Farmington, Connecticut, speaks of the troubles encountered by a local textile manufacturer in marketing his output: while imported cloths commanded cash, he had to dispose of his goods through barter because of their inferior quality. "It commonly takes two or three turns before he can convert them into money and this is an inconvenience he cannot remove for want of proper machinery to give a high finish to his cloths, which his property will not enable him at present to procure." Again, in the sale of hats, according to O. Burr & Company of Danbury, domestic goods suffered from the inferiority of manufacture in this country by certain producers—here, as these gentlemen think, due to the fact of "Persons setting up the Business who never served [apprenticeship] for the Trade." Especially interesting, however, in the light of modern conditions are two other features to which, as far as I know, attention has heretofore been called but rarely. One relates to the unavailability of raw material in the cotton manufacture. Both Moses Brown and George Cabot speak of the poor quality of American cotton and the necessity of using imported material. The former points out that while the inferior stuff "will Answer to work by hand,"

"Cotton must be clean before it works well on the Mashine." To this Cabot adds the novel thought that "it appeared early to be essential" to the interest of the Beverly mill "to use cotton of the longest fibre & the best cleaned" for this reason: that "in proportion as our workers are awkward & unskillful is the necessity of furnishing the best materials—bad materials wou'd be wasted altogether."

Cabot is responsible also for the other feature above mentioned. With respect to the employment of foreign artisans in starting operations, he makes the keen observation that "destitute of the necessary information ourselves" of the business undertaken, "we are subject to be misled by every pretender to knowledge." He goes on to remark that "a number of Europeans chiefly Irish have been successively employed by us, but as no one of them was master of any branch of the business, and most of them proved deficient in some quality essential to usefulness, one only has remained in our service." And a somewhat similar case is intimated by Moses Brown relative to certain machinery, when "Two persons from Scotland who took their Ideas from Observation and not from Experience" constructed apparatus which in fact failed to work well. Apparently Yankee shrewdness could not entirely obviate mistakes of over-confidence under circumstances of industrial infancy.

Equally interesting to the historian are the suggestions of localization in industry and the indications of new manufacturing processes or machinery. As to the former, perhaps it will suffice to note the importance already attained by Danbury as a center of hat manufacture; and the intimation that Suffield, Connecticut, had once excelled in the production of wooden dishes. This production, "the Ancient Characteristic Manufacture of Suffield," is reported to have disappeared—"Our Materials are gone." As to new processes and equipment: one may note the enlargement of a furnace for the manufacture of "Blisterd Steel," as mentioned by Aaron Elliott of Killingworth, Connecticut; the "New" manner and process of making potash, as spoken of by Alexander King of Suffield in the same state; and various textile improvements described by Moses Brown, Elisha Colt, George Cabot, and others.

Such are some of the treasures to be found in these "ancient"

letters. They are valuable to the modern investigator, and undoubtedly were of exceptional worth to Hamilton. The fact that he preserved them is some indication of his attitude, and there is evidence to be drawn from the Report itself that he found them highly informative. To be sure, many of Hamilton's descriptions of existing domestic industry, as above suggested, are quite general in character: that production of steel "has already made a considerable progress," or that "manufactories of paper are among those which are arrived at the greatest maturity in the United States." Such propositions indicate that he had gathered together scattered bits of data relative to such industries and drawn summary conclusions in his own way. But there are also numerous occasions at which specific connection may be established between the letters and the Report. The citation of "essays" at silk manufacture in Connecticut, of the "flourishing manufactory" of sail-cloth in Boston, of a "prolific" lead mine in Virginia, and the "precious embryo" in wool manufacture at Hartford are cases in point—and various others, including the cotton mills at Beverly and Providence could be quoted. Moreover, now and again one finds a similarity of thought between some general statement in a letter and a passage in the Report. Such, for example, is apparent with respect to a point raised by Benjamin Huntington in his letter to John Chester, when he suggested that the encouragement of manufactures might serve "to Increase the Commerce between the Northern & Southern States & by that means at once to Increase our Internal Trade & Strengthen the Union as also to promote an Acquaintance and Assimilation of Manners among the People in the several States." With this one may compare a section of the Report on Manufactures, where in developing his theme of the nation-wide gain from establishing manufactures, Hamilton says: "Mutual wants constitute one of the strongest links of political connexion. . . . Suggestions of an opposite complexion are ever to be deplored as unfriendly to the steady pursuit of one great common cause and to the perfect harmony of all the parts."¹

But there is another face to the shield. At least one defect appears in the series of letters now presented—as one glances over them—if they be considered as original data for a broad in-

¹ See Report, p. 286, below.

dustrial survey of the United States in 1790-1791. One notes that almost no material is included with respect to the middle states.¹ This is at first surprising. But upon consideration I am inclined to think that the lack is not due to loss of manuscripts from Hamilton's effects, as one might at first suspect. I doubt if Hamilton made any inquiries with regard to the manufacturing activities of these communities. It is not unreasonable to assume that if there had been correspondence with individuals of New York and Pennsylvania about these matters, at least some scrap would have survived when so large a stock from gentlemen of Connecticut and Virginia and other states has come down to us. Secondly, a perusal of the Report shows that, while Hamilton made specific mention of mills or mines in Massachusetts, Rhode Island, and elsewhere, he fails to cite any particular enterprises in these chief middle-Atlantic areas. On the other hand, it is equally obvious that he was familiar with developments there, since in various connections, as of the manufacture of glass or iron, he makes assertions which are not supported by any evidence drawn from New England or Southern sources.

I am disposed to hold that by reason of his own broad familiarity with industrial conditions in the middle states he felt no necessity of acquiring additional data. The only indication that he relied upon others for information with respect to middle-state manufactures is the presence among his Papers of a newspaper clipping from the American Museum, a Philadelphia paper, which has a note appended that it had come "from the Author." This article, written by a man who was later the biographer of David Rittenhouse, exhibits the results of considerable research on the author's part; and there is some indication that Hamilton made direct use of these "cursory remarks" of Mr. Barton. Not only is there frequently a similarity of thought in this composition and in the Report on Manufactures, but with respect to the condition of particular industries there appears a dependence upon Barton, unless of course Hamilton drew wholly from his own personal knowledge. Certain manufactures, ignored or but lightly touched upon in

¹ Only one document is presented for each of the states, New York, New Jersey, and Delaware, barring a letter of transmission; and one of these, the letter from Nathaniel Hazard of New York, is only incidentally concerned with manufactures.

the correspondence already discussed, and yet given appreciable prominence in Hamilton's Report, are described in some detail in Barton's paper—for example, printing and glass-making. And somewhat odd portions of particular industries—the making of paper-hangings and that of edged tools—appear in both documents. Because this print of Mr. Barton's article apparently was treasured by Hamilton, because with the superscription from the author it technically falls within the bounds of Hamilton's correspondence, but most because it makes some contribution toward an understanding of the Report on Manufactures, I have thought it worth while to include this item in the present publication.

The correspondence which forms the next two parts of the present volume is of quite a different character from any of the foregoing. Not only are they chiefly commercial, while the first was chiefly industrial, but they do not center about any particular composition from Hamilton's hand. Occasional passages in the Report on Manufactures or in other of his state papers seem to reflect the material of this correspondence, though of course one cannot be sure. A case in point arises in connection with a brief report by Hamilton to the House of Representatives upon trade with the Orient, transmitted February 10, 1791.¹ Here he speaks of the possibility that "an additional and extensive field for the enterprise of our merchants and mariners" and "an additional outlet for the commodities of the country" may exist in the trade with China and India; but adds that "a full and accurate examination should be made into the nature and tendency of that trade" before any encouragement beyond that already given should be extended to the commerce. One wonders if Hamilton was thinking of the conditions in the China trade revealed by Randall in his most interesting letter to Hamilton—the initial letter in the Part on this eastern trade. Again, one may quote the identity of thought concerning the results of a recent "insurrection in Hispaniola" as given in the Report on Manufactures when Hamilton is treating of molasses imports, with a section in the essay which Jeremiah Wadsworth transmitted to Hamilton under date of December 10, 1791.

Defence for the publication of this correspondence must rest

¹ This report is printed in *American State Papers, Finance*, vol. I, p. 107.

rather upon the intrinsic value of these documents. Thomas Randall's story of the beginnings of our trade with China perhaps needs least comment. It is an absorbing yarn in itself. Here is the testimony of the man who went as joint super-cargo on the first American vessel to trade with China, and who later served as American vice-consul at Canton, concerning the conditions under which business with the Chinese had to proceed in those early days. To be sure, another account of that first voyage exists, one written by Mr. Samuel Shaw of Boston who went as the other super-cargo of the vessel. This account, which was subsequently printed by the government, also gives some description of the trading difficulties then existing at Canton. Randall's story, nevertheless, is well worth reproduction. It is much fuller on the side of Chinese commercial practices—or mal-practices—than is Shaw's, and is done in a much more picturesque style. Shaw's tale is dull reading after Randall's.

The documents transmitted by Randall with his letter to Hamilton are also valuable. The instructions of the British East India Company to their Canton agents and the list of ships arriving and leaving Canton in 1789, fragmentary though they be, carry data upon this early trade which are not available in existing histories—not even in Morse's four-volume work on the British Company. Especially noteworthy are the manner in which the East India Company computed its requirements year by year, and the lists of "country" (Anglo-Indian) and foreign ships which put in at Canton.

The rest of the letters, though somewhat miscellaneous in character, give highly useful information upon various aspects of our foreign commerce about 1790. Particularly significant are the letters of George Cabot and Jeremiah Wadsworth upon the trade to the French West Indies. With these islands, the United States was just then beginning to have increased commercial relations; since, with the abnormal conditions imposed by the French Revolution upon the trade between the mother country and the French West Indies, the ports in the latter were being opened to American vessels.

The third group of letters herewith presented relate to the personal venture of Hamilton in connection with the Society for establishing Useful Manufactures, frequently spoken of as

the "S. U. M.", which erected a cotton-manufacturing plant at Paterson, New Jersey. This enterprise was in a certain sense the practical side of Hamilton's advocacy of domestic manufactures, of which the theoretical side was displayed in his distinguished Report. Fortunately the formation, flotation, and vicissitudes of the company, especially during the first years of its existence, have been recounted by Professor Joseph S. Davis in his excellent volumes, "Essays in the Earlier History of American Corporations." There, in a wealth of detail which goes much beyond the scope of these letters, appears an intimate history of this "first New Jersey business corporation"—though a history which was in part drawn from these letters now presented.

Yet the publication of these communications to Hamilton is not without value. For one thing, these documents, though concerned with a particular business undertaking, are not without connection with the main interest of this present volume, the Report on Manufactures. The S. U. M. was in process of flotation at just the time that Hamilton was drafting his Report and specific mention to it is made therein. After a general reference to activity in working cotton within the country, he says that "in addition to this, it may be announced, that a society is forming, with a capital which is expected to be extended to at least half a million of dollars, on behalf of which, measures are already in train for prosecuting, on a large scale, the making and printing of cotton goods." Perhaps it may be attributable to common human frailty that this announcement precedes by some little space consideration of the Providence and Beverly cotton-manufacturing plants!

Furthermore, among these documents, there is included the "Prospectus" of the S. U. M., an outline for public consumption of the scheme then well under way, which is also related to the Report on Manufactures. The first paragraphs are devoted to an examination of the desirability and practicability of domestic industry, and, as Professor Davis points out, these paragraphs give "ordered expression to a group of ideas which reappeared three months later in a famous state paper."¹ On the whole, to be sure, the cast of thought in the "Prospectus" is more extreme than in the Report. Thus the statement contained in the

¹ Davis, *Essays*, vol. I, p. 357.

opening paragraph of the Prospectus, that "it seems an almost self-evident proposition that communities which can most completely supply their own wants are in a state of the highest political perfection", becomes moderated in the subsequent document. Hamilton there contents himself with the assertion that possession of the means of subsistence and defence is "necessary to the perfection of the body politic; to the safety, as well as to the welfare, of the society; the want of either is the want of an important organ of political life and motion; and in the various crises which await a State, it must severely feel the effects of any such deficiency".¹ Again, the Prospectus seeks to show what the Report ignores—the identity of individual and common interests: that while it is manifest "that the interest of the community is deeply concerned in the progress of this species of industry, there is as little room to doubt that the interest of individuals may equally be promoted by the pursuit of it".

Another aspect of these letters which tells in favor of their publication is the evidence contained in them of the technical difficulties of launching a manufacturing enterprise in those early days. The applications of Thomas Marshall and others for employment, the criticisms of William Hall (whose letter brings to mind the thought expressed by Cabot that manufacturers were then exposed to imposition by foreigners), and the explorations made in connection with the choice of site—not only are these all of marked interest to the modern student of economic conditions in 1790, but they play a part in our investigation into the back-ground of Hamilton's Report. He carried from the tribulations of the S. U. M. an intimate knowledge of the obstacles involved when attempting to establish a new industry; and he may well have been influenced thereby in his general attitude toward "the intrinsic difficulties incident to first essays", of which he makes so much his famous state paper.

For these reasons, I have thought it worth while to select the more general documents of this group preserved in the Hamilton Papers at Washington, in so far as they antedate the Report on Manufactures, and to present them here with the letters and other material more closely allied to that Report.

¹ See Report, p. 284, below.

PART I

Letters concerned directly
with the
Report on Manufactures

Connecticut

(1)

JOHN CHESTER to HAMILTON, *transmitting correspondence on Connecticut manufactures.*

Colonel John Chester, the author of this first letter, was supervisor of the revenue for Connecticut, to which office he had been appointed after serving notably in the Revolutionary War, presiding as speaker over the Connecticut House of Representatives, and sitting from 1788 to 1791 as a member of the Governor's Council or upper house.

As supervisor he was called upon directly by Hamilton for information concerning the manufactures of Connecticut; and this initial document in the present series is one to the Secretary of the Treasury covering the transmission apparently of all the correspondence which he had received relative to that subject.

CONNECTICUT, OFFICE OF SUPERVISOR

Sir, October 11th 1791

In compliance with the request in your Circular of 22^d June last, herewith are forwarded a number of letters, which have been received, & relate to the subject of Manufactures carried on in this State; together with sundry samples.

After having revolved in my mind several plans for obtaining the necessary information, none was thought of which afforded so flattering prospects, as that which was adopted, of writing to each member in the upper branch of our legislature,—as well as to many of the principal manufacturers. The most of my letters have been answered; and if the information is not so full & complete, as could be wished, still it is the best which could be obtained, & may possibly be of some service.

Accounts of the silk manufactured at Wallingford, and of the linnen & cotton made at N Haven, also letters from several gentlemen on this subject are expected, and shall as soon as they are received be transmitted.

I am with the greatest consideration

Sir,

your most obed^t servant

JOHN CHESTER

[Endorsed] 11th Oct^r 1791

John Chester

(2)

PETER COLT to JOHN CHESTER, *on manufactures in Connecticut.*

Peter Colt was a man of importance in Connecticut. He was a graduate of Yale, a merchant in the West India trade during the years 1768–1776, was appointed deputy commissary-general for New England and New York (serving under Jeremiah Wadsworth, cf. below, p. 174) during the Revolution, and occupied the position of Treasurer of the State from 1789 to 1793. He was interested in manufactures, being associated with Jeremiah Wadsworth and Elisha Colt in the conduct of the Hartford Woolen Mill, and later (1793) he moved to Paterson, N. J., to take charge of the cotton mill erected there under Hamilton's inspiration, the plant of the S. U. M. (cf. below, Part IV).

Hartford July 21. 1791

Dear Sir,

The conversation which I had with you some days past on the subject of the Secretarys Letter respecting our manufactures, has given occasion to the imperfect History of that Business which accompanies this. I shall leave it to your judgment to make such use of it in your correspondence with the Secretary as you may deem proper—or wholly to suppress it; [only observing that I wish not to appear at all in the Business]¹ I am not possessed of sufficient documents on which to ground any details or calculations as to the amount of the products of our different Manufactures—or their annual value—a very superficial History of them is all I can pretend to—& this I trust you will find to be the Case with other Gentlemen to whom you may apply for information on this Subject—I have only to subjoin the Names of those persons most likely to give you information respecting this Business in the different parts of the State—

M^r Josiah Burr of New Haven is the Manager of the Linen manufacture, & is a person of good information—M^r Robert Walker of Stratford will probably be best able to inform you of the present Situation & Extent of the Duck Manufacture established in that Town—James Davenport Esq of that at Stamford—M^r Sam^l Richards that at Farmington—Chaney Whitelsey Esq that at Middletown—M^r W. Hubbard that at Colchester—M^r Job Tabor that at N London—M^r Daniel L. Coit that at Norwich—Col^o J. Trumbull that at Lebanon

¹ These words were inserted and then scratched out.

& Maj. Daniel Putnam of Brooklyne that at Killingsly & its neighbourhood. If it should be judged necessary, I believe I can procure you an accurate return of the Wool purchased & worked up into Cloth & the quantity of each kind manufactured at Hartford since the Commencement of the Business —

I am dear Sir

with very sincere regard

Your most obedient

hum^e Servant

P. COLT

Col^o Jn^o Chester

[Addressed] Col^o Jn^o Chester

Wethersfield

[ENCLOSURE]

July 1791

A succinct account of the manufactures carried on in the State of Connecticut —

The Manufactures of this State naturally present themselves to our view under the following Heads;—Those carried on in Families merely for the consumption of those Families;—those carried on in like manner for the purpose of barter or sale; & those carried on by tradesmen, single persons, or Companies for Supplying the wants of others, or for the general purposes of merchandize, or Commerce.—

Those which come under the first description, & which are purely domestic, are the most exclusive & important; there being scarcely a Family in the state either so rich or so poor as not to be concerned therein. These domestic Manufactures are of Linen, of Cotton & of Wool, in their various modifications. Out of those raw materials are made an abundance of Linen, Cotton, Woolen & Worsted Hose, worn by all ranks of people; so as greatly to lessen the Importation, particularly of the more ordinary kinds, notwithstanding our increased population & wealth has greatly increased the Consumption of those articles. Next to those Branches may be reckoned those of tow cloth, coarse Linens, Linen & Cotton for Shirting & Sheating, table Linen, checked & Striped Linens, and Bedticks; also coarse fustians & Jeenes for mens wear, & white Dimity of the Women.

The manufactures of Wool are of various kinds of Cloth for Servants and the ordinary wear of the whole Class of our Farmers & most of those who follow any of the usual Trades or labourous occupations. This branch of domestic manufactures is extending itself very fast, both as it respects the Quantity & Quality of the Goods. A great proportion of our most substantial Farmers and mechanicks appear dressed on *Sundays* and *holydays* in the manufactures of their Wives & daughters; & this is becoming every day more reputable. We may add to the foregoing list *thread* both white & coloured, Lace & fringe for various purposes, and of late sewing Silk.

There is manufactured also large parcels of almost all the denominations afore recited for the purpose of barter, or sale to the merchants, who export them out of the State — within these few Years attempts have been made to extend our manufactures, & for improving the fabricks. This has been attempted either by single persons or by companies, with various success. of this discription is the Linen manufacture established at *New-Haven*, from whence large parcels of coarse Linens have been Shiped to the Southern States & to the West Indies.— The same kind of manufacture has more recently been established at Middletown and New-London; the Stock at all those places being raised by Subscription, & managed by an agent for the benefit of the adventurers. To these may be added the manufacture of Cottons set up by merchants at Glastonbury & Lebanon, on rather a small scale; & that at Norwich on a more extensive plan, backed with a larger capital. At Farmington there is a small manufacture of checks, both Cotton & Linen, of Bedticks, and of Fustians & Jeenes. The same person has made some attempts in the Worsted and Woolen Branches, but his Stock is too limited to make much progress.—at Stamford is a similar manufacture—all these are carried on by single persons or Merchants trading in Company; and their Stock is generally small. To these may be added the manufacture of Duck in Stratford (which however is principally confined to Families) & that established at Colchester, on the plan of those at Boston. That is both warp & woof are spun, not on wheels, but drawn out in the same Manner as the Yarns for Riggins are in Rope walks —

At Killingly there is a small Manufacture of Woolens begun

under the care of a M^r Kendall, who has received Some encouragement from Government,¹—I believe he has made only coarse cloths & Coatings; & those only narrow—I believe neither his capital or knowledge of this Business will justify our expecting much from this attempt, untill he connects himself with persons of more information, & who shall be possessed of the Means of carrying their projects into effect.—

I have purposely omitted mentioning the Woollen Manufacture which has been established, or rather attempted, at Hartford, as being on the most extensive plan, & which has the fairest prospect of succeeding.² This Manufacture commenced about *three* Years ago, with a Capital of £1200,—raised by voluntary subscription in shares of £10—each; some of the subscribers taking more, some less, as their patriotism or circumstances dictated—This Stock being found too small to effect the views of the Company (which were to determine the Question if *American Wool* would make Cloths equal to *British Wool*, & at reasonable prices) was extended by new subscriptions to £2800,—which is the amount of their present Capital. This Stock has been employed in buying Wool, & working it up into Worsted Goods, Narrow & Broad Coatings & Cloths—after having been sorted & prepared in the Manner practiced in Great Britain— This Company have received some aid from Government—viz a trifling bounty the first Year on Spining—then an exemption, for two Years, of their Workmen from a *Poll Tax*; & their work shops from all taxes for the same term of Time— These same privileges were extended to the manufactures established at Farmington, New Haven & Killingly. But this indulgence is no longer continued to any of them.—

The Company at Hartford had expended so much of their small capital in Buildings, Impliments &c that they found themselves under the necessity of applying to Government for some Aid— The Legislature being sensible of the Importance of encouraging this infant establishment, granted them a Lottery to raise £1000,—to enable them to procure a more com-

¹ Apparently this is the same concern referred to in the letter of William Williams to John Chester (see p. 42, below) as prosecuted by a man named Cordall, and referred to by Bagnall (*Textile Industries of the United States*, p. 87) as conducted by one William Cundall. Bagnall states that this William Cundall, of Killingly, petitioned the Connecticut General Assembly in 1787 and was granted a lottery.

² See Hamilton's comments on this "promising essay" in his Report, p. 314, below.

pleat set of machinery, & for extending their Business. This Lottery will probably Net them three Thousand Dollars—& enable them to make a further tryal in this laudable attempt to establish so valuable a manufacture. The Event is yet, however, very problematical¹ Those persons concerned in seting up new Manufactures have every obstacle to surmount which can arrise from clashing Interests, or ancient prejudices; as well as from the smallness of our capitals, the scarcity of Materials & workmen, & the consequent high prices of both. In this respect the obsticals which are opposed to the Woolen manufacture are the greatest. The reasons are too obviouse to need reciting. Some kind of aid therefore, from the General Government of the United States will be necessary in order fully to establish Manufactures, for the purpose of Barter or Merchandize—those for domestic purposes only, will be continued from mere necessity. How this is to be effected, those who administer the Government must determin— In addition to the foregoing List should be subjoined the manufactures in Wood, in Iron & in Leather, both for home consumption & for exportation—Household Furniture & wheel Carriages of all kinds are made in plenty & prety good Stile—& considerable is exported to the Southern States & to the West Indies— The manufactures of Iron are varieuse & extensive—& exceed our demand for home consumption, except Cutlery & some part of the Tools used by Tradesmen—our manufactures of Leather are considerable; so as to make a full supply of shoes & Boots;—Saddles, Bridles, Horse Harness &c even for Exportation—we make also stuff & silk shoes nearly sufficient for the consumption of the State—

As to the quantum of all these manufactures, either those used amongst ourselves, or those exported; or the value of them in Money, I dare not hazard an oppinion, not having the details on which to make the calculation,—or ground such an oppinion— But considering the Number of our laborious & active Citizens, & our modes of Living, it cannot otherways than be considerable—& it is yearly increasing— The manufactures carried on in our Families may be calculated to increase the value of the products, beyond that of the *raw Materials* as three to one—Those established in factories—such

¹ For accounts of the Hartford factory, including its early demise, see Cole, *American Wool Manufacture*, vol. I, pp. 64-69; and Davis, *op. cit.*, vol. II, pp. 266 ff.

as the woollen manufacture at Hartford, not less than four to one, or even five to one—

When the active Stock of the Citizens shall no longer be embarked in paper Speculations, then we may expect to see part of it turned to the promoting & extending our manufactures—& then those which languish and dwindle for want of being supported with proper Capitals may be expected to prosper—& this Country freed from a disgracefull dependance on Europe for their ordinary Cloathing—

P. S.

I might have mentioned Tin men, pewterers, Hatters &c. & SilverSmith in a great plenty—Braizers, Brass founders,—& of late Button makers—this last Business is of a recent date, but promises to become extensive—

(3)

ELISHA COLT to JOHN CHESTER, *on woollen manufacture in Hartford, Ct.*

Elisha Colt was associated with Peter Colt and Jeremiah Wadsworth in the Hartford Woollen Factory. He was also the merchant through whom cloths of the mill were sold.

HARTFORD, *August 20th 1791*

Sir

In answer to your favour of 16th Inst. on the subject of the Woollen Manufacture established in this place, I am now to observe, that the Business commenced in June 1788 with a Capital of £1280,—raised by subscription in shares of Ten pounds each— The first season we purchased about Seven thousand pounds of Wool, and such Implements as were of prime necessity in carrying on the Business, which was managed by an Agent in behalf of the Company; This was meant as an essay only, to determine if this Branch of Manufactures could be made profitable in this Country,— We were at that period not only totally unacquainted with the various parts or subdivisions of the Labour; but equally destitute of every kind of Machinery and Labourers for executing such a project— But the news of this infant attempt to establish so usefull a

Manufacture soon collected a number of Workmen about us, who had been bred to different branches of the Woolen & Worsted Business in England— These were chiefly old Soldiers who had deserted the British Army, or having been taken prisoners during the late War, remained in the Country.— From these men we have acquired some usefull Knowledge, tho at a dear rate; as every one had some project to [present of]¹ his own to propose, or improvement to make in the various Implements &c. used in our Business—but some of them had a sufficient mechanical Knowledge to give proper directions, or make themselves understood by our Mechanicks;—of Course we expended considerable Sums from which we received no manner of Benefit— We have had to struggle with every kind of embarrassment which can attend the setting up a new Business; either from the Ignorance, the Knavery or the fickleness of the workmen; the high price of materials; the smallness of our Capital, and the prejudices of the Community against *home made* Cloths, and the interested views and Jealousy of the British Factors and agents in this Country.— So much of our small Capital was Consumed in building our works & procuring the necessary Implements for carrying on our Business (as there was not a single Loom in the Country in which a piece of Broad Cloth could be wove; nor a pair of Stocks in which it could be fulled, or a board on which it could be sheared &c) that the proprietors found it absolutely necessary to enlarge their Stock.— This was done, the *second season*, by new Subscriptions by which our Capital was raised to Two thousand eight hundred pounds— Notwithstanding our Stock was more than doubled, we found ourselves *last fall*, so cramped in our Business, by losses and improvident bargains, and by having so large a part of our fabricks on hand, that the Business was in danger of totally failing, when the Government interposed, and granted us a Lottery for raising One thousand pounds to enable us to procure a Stock of Wool for the present season, and such further Implements as may be necessary effectually to establish our Works.— This Lottery will probably nett the Factory nine hundred pounds and has proved a most seasonable aid— We have now erected a Building well calculated for carrying on this Business in the various parts,

¹ These words "present of" are scratched out in the manuscript.

in which we have three Broad & five Narrow Looms at work—which will consume about 12,000 pounds of Wool p annum—Our Wool is collected about the Country from the Farmers who raise it, it costs from $1/2$ to $1/6$ the pound, taken at their Houses—when it comes into the Wool store, the Fleeces are broken up and sorted exactly in the manner practised in England, by workmen regularly bred to that branch— We make *six* sorts besides the coarse hairy parts which is only used for *listing*.— After this operation the wool is washed clean and dried, when it is passed thro' a Machine called a *Willow*, which operation serves to pull the Wool in peices and seperates the dirt & dead hairs—after which it is oiled and then *Scribled*—by which operation it is prepared for the Spinners— This is a very laborious & expensive part of the process in making Cloths (particularly mixtures, which require to be repeated three times) and is now performed in England by machines that are worked by Water— So far the work is performed under our Eye and immediate management—it is then put out in Families in the neighbouring districts to be spun into yarn—when it is returned to the Factory and there warped into proper peices and wove into Cloth in our own Looms, as the Country Looms will not make even the narrow Cloths of sufficient width for our purpose—from the Loom they go to the fulling Mill, to be scoured & partly fullled, when they go thro a process called *burling*, by which all knots, lumps &c. are taken out; and in mixtures, every thing that would disfigure the Cloths when finished—they are then returned to the Mill & the Fulling is compleated; when they are deliver'd over to the head Clothier or finisher, who raises the nap-shears-presses & packs the Cloths for market— Every part or branch of the Business is managed in the same manner as practised in England— We dye both in the Wool and in the Cloth; tho we are perhaps more deficient in this Branch than any other part of the Business.

Since the commencement of this Business in the summer of 1788 (when we were destitute of Implements and Workmen) we have purchased and worked up (previous to the present season) about 20,000 pounds of Wool into Goods of different kinds & values, and which have been sold at al prices from $1/6$ to 28/ p yard—viz^t

69 peices narrow Baizes mak ^g 2308 y ^{ds} averaging @ 2/ —in sales					
17	d ^o	shallons	465	d ^o	2/6
21	d ^o	Lastings	510	d ^o	4/6
45	d ^o	Serge	1007	d ^o	5/6
24	d ^o	Elastick Cloth	524	d ^o	7/
84	d ^o	broad & narrow			
		Coatings	2252	d ^o	4/9 & 7/6
97	d ^o	narrow Cloths	2557	d ^o	6/6
89	d ^o	broad Cloths	1833	d ^o	12/or 13/
39	d ^o	Casimeres	1072	d ^o	—8/

Besides a considerable quantity of Yarns and Cloths in different stages not yet finished— The making of Baizes Shalloons & Lastings, we have declined, as unprofitable—

Samples of some of our Fabricks that are *now on hand* will accompany this for the Inspection of the Secretary of Treasury—

At present we enjoy no exclusive priviledge, or indeed any emolument from Government

The Embarrassments we labour under arrise from the Scarcity of Wool, and the consequent high price of that article; and the frauds and impositions we are subject to in purchasing Wool, from a total want of inspection or regulations in packing the Wool for market—from the scarcity of Workmen; particularly dyers and finishers of Goods—from the want of machines for expediting Labour; such as Scribling or Carding machines, that are worked by Water, and Jennies for spinning yarn —

The present use of Machines in England give their Manufacturers immense advantages over us— This we expect soon to remedy— But the price of Wool must be high with us, untill the people of the middle & southern States can be induced to turn their attention to raising Sheep—should this take place, in a very few years we may raise wool enough for the consumption of this Country & make every kind of Woolen Goods sutable for every discription of People from the highest Class of Citizens to the Negro Slaves.— Whilst Wool is so scarce we are obliged to purchase our Years stock as soon as it is taken off the Sheep—as our Capital is so small this is an unfortunate circumstance—and the impossibility of hiring Money on legal interest, adds to our Embarrassments. This evil we endeavoured to remedy by contracting for Spanish wool; but we were so imposed upon by the Merchant in the quality of the Wool that we have been deterred from recuring to this expedient again—

We are daily making improvements in the manufacture of Cloths—and are in hopes of procuring Machines for scribbling Wool & Spinning it into yarns, so as to enable us to meet the British on equal terms in market: and that as soon as the rage for Speculation in the funds of the United States shall have ceased, part of the Money of the Country, which now circulates only in paper trafic, may be directed into this channel for the aid of our infant Manufactures —

What encouragement it will be proper for the General Government to afford us; either by exemptions, by Bounties, or by duties on Importation the Legislature of the United States must determine— They alone are Competent to this Business—the seperate States having neither Authority or Funds for the purpose—

By giving you this *History* of our Manufactory, I have answered your various queries in best manner in my power—
and am with great respect

Sir

Your most obedient &
most Humble Servant

John Chester Esquire
[Endorsed]

ELISHA COLT

Mr Elisha Colt manager of the Woolen
Manufactory in Hartford August 20th
1791 with Samples Rec^d Oct^o 8th 1791

(4)

HEMAN SWIFT to JOHN CHESTER, *on manufactures in Litchfield County, Ct.*

Heman Swift was one of the members of the Governor's Council to whom Chester wrote for information (see p. 1, above). Swift served for twelve years as a member of the Council, after having gained distinction in the Revolutionary War.

CORNWALL, *August 22^d 1791*

Sir

I receiv'd your favour of the 10th instant yesterday, and should be very happy to comply with your request in making Out a statement respecting the Manufactures in this County, but am obliged to set out on a journey into the state of Vermont the day after tomorrow which will prevent my being able to

get the Necessary information before you will be oblig'd to make returns. I consider those matters you mention of very great importance to this State, and wish to pay every attention in my power to ascertain them; I am so well acquainted in the County that I am sure very Little attention is paid to manufactures therein except in the Domestic & Iron manufactures both of which are carried on to considerable advantage; and with suitable encouragement might be increased to considerable perfection, as this County is peculiarly calculated for carrying on the Iron manufacture as there is a great plenty of wood & Ore. There has Lately been discovered two beds of ore which I think will prove good: There is in the County one Furnace and twenty six Forges that I recollect; All owned by Individuals, and two Slitting works the Forges are too many of them Owned by Men that are not Able to stock them well, and of consequence are not carried on to advantage, yet there are others that are carried on to the best advantage; There are other new works Erecting and that branch of business is increasing fast. but in the smaller branches of the Iron Manufacture very Little attention has been paid except One works where is carried [on] the making of Ancors and Mill Irons: which are carried on to the best advantage common bloom Iron is sold at 20/ pr. hundred but the smaller branches are exceedingly Neglected and want encourageing; as to Domestic Manufactures they are carried on in almost every family so far as to make coarse woolen and Linnen cloth for the consumption of their own family. But the Iron made in this County is principally of the Bloomery kind yet of the best quality. An addition of a Furnice or two I think would be very profitable to increase the Quantity of refined Iron—You will please to excuse the inaccuracy of my information as I am obliged to write in haste

I am sir with every sentiment
of Esteem your Obd^t serv^t

HEMAN SWIFT

The Hon^l John Chester Esq^r
[Addressed] Honorable John Chester
Wethersfield

[Endorsed] Hon^l Heman Swift
Cornwall (in Litchfield County)

22 August 1791

(5)

BENJAMIN HUNTINGTON^r to JOHN CHESTER, *on manufactures in New London County, Ct.*

Benjamin Huntington was a man of much prominence in Connecticut. After graduating from Yale and studying law, he served successively as member of the State legislature, Governor's Council, Continental Congress, and federal House of Representatives. He was a member of the Governor's Council, serving a second time (1791-93) after his national activities, when this letter was written.

NORWICH August 24th 1791

Sir

Your Letter of the 10th Instant has been Rec^d but being Necessarily Absent last week could not Attend to the Subject you mention untill Monday last and being on the same Business this Day I found Col Leffingwell on the Same Employ through the Request of M^r Learnand & we have agreed on a Report as near as we can state one, not only for this Town but for the whole County N London excepted, which you will Receive in a Short Time from him. It is Impossible to State the amount of Articles Manufactured in the Several Branches with Accuracy but have done it as near as we can

There are no Manufactures of Consequence in Stonington, Groton Lyme Colchester Franklin Lisbon or Montville saving such as are mentioned in M^r Leffingwells Report Ship Building and the Cod fishery are the Principal in Stonington but I Suppose these are what the Secretary has had a better account of than we can Collect. The Domestic Manufacture of Coase Linins and Wollens is very considerable more than Sufficient for the Consupcion of Farmers Families —

As to Impediments and Encouragements I know of None but what you are Perfectly Acquainted with The Impediments Complained of by the Mechanics are the Assessments on the Trade of Facutised Persons, the Poll Tax on Apprentices, Equipments & Loss of Time for Military Service and the want

of an Increase of Duties on Goods Imported which might be manufactured here¹

I well Remember the Design of Congress in Directing the Secretary to Report was the better to Enable the Next Session of Congress to Judge what Manufactures to Encourage and to adopt measures for that Purpose (This will extend Principally to Articles Imported which might as well be made at home) and to Increase the Commerce between the Northern & Southern States & by that means at once to Increase our Internal Trade & Strengthen the Union as also to promote an Acquaintance and Assimilation of Manners among the People in the several States The good Effects of this Design when accomplished are very Obvious

I am sir with Esteem & Regard

your Friend & Hum^e Serv^t

BENJ HUNTINGTON

Col. Chester

[Addressed] Hon^{le} John Chester Esq^r
Supervisor of Duties &c
Weathersfield

[Endorsed] Hon^{ble} Benjamin Huntington
Norwich (N. London County)
August 24, 1791

¹ The "impediments" to industry, relative to taxation, may be explained as follows: The state of Connecticut at this time levied taxes upon the returns of lucrative professions, trades, and occupations (except compensation to public office, profits of husbandry, and common labor for hire) according to assessments which were proportioned to the estimated gains thereof. Indeed, certain minimum assessments were specified in the law: besides the professions of attorney-at-law (at least \$167) or of physician (at least \$50), each person who followed any mechanical art, such as smiths, shoemakers, tanners, etc., were to be assessed at least \$17 (*American State Papers, Finance*, vol. I, pp. 423-425; *Acts and Laws of the State of Connecticut*, 1796, p. 280).

The poll tax at this time was a heavy affair. According to the law as it stood in 1791, males sixteen to twenty-one years of age were required to pay £9 per head, and those over twenty-one £18 (*Acts and Laws*, 1784, p. 128). Presumably apprentices were assessed the lesser amount, in so far as they fell within the ages specified, and the masters were liable for the taxes so assessed.

The "Military Service" spoken of probably refers to the call for certain days of training and assembly required of all able-bodied citizens from sixteen to forty-five years of age in connection with the state militia (*Acts and Laws*, 1784, pp. 151, 381).

See Hamilton's comments on poll or capitation taxes: Report, pp. 299-300, below.

(6)

CHRISTOPHER LEFFINGWELL to JOHN CHESTER, on manufactures in Norwich, Ct.

Christopher Leffingwell was a prominent merchant of Norwich and for a time interested with one Thomas Hubbard in a stocking manufacture in that town.

NORWICH 26th Aug^t 1791

Dear Sir

in Consequence of your Application to M^r Learned and M^r Huntington¹ to procure a Statement of the Manufactories in the County of New London they have both applied to me to give you the best information I could collect which I here inclose the principal part of which is in this Town which [I] Imagine will at some future day become a very Considerable manufacturing place—my reasons are these it is at the head of a Navigable River in a Very plentiful Country for every kind of Provisions There is a plenty of fuel which will always be Cheeper than in any other Considerable Town I know of The Stream which runs thro this Town has many Mill Seats more & better than in any Other in this State and a great Variety of Manufacturing will be done by Machinery turnd by Water I do not know what Establishments the Secretary Col^o Hamilton has in View respecting Manufactories—but I concieve if he has it in Contemplation to Establish Several on the large Scale he cannot find a better place in the United States than Norwich—Suppose a Cotton Manufactory for making every kind of Cotton Goods should be thought an Object . . the Carding Spinning & considerable weaving may be done by Water Machines

The Calandaring the Stamping or printing & almost every part may be done in that way & Save $\frac{7}{8}$ ths of the Manual Labour Suppose the Crockery Business in the Variety of its branches should be thought an object & I concieve it to be a Capital one . . . the Consumption of that Article is immense and the freight from Europe amounts to an Amazing sum—the Materials may be Ground & prepared by Water Machines and fuel is a Considerable Article.—

¹ See letters of Learned and Huntington, pp. 28–29, below, and pp. 13–14, above.

Suppose the Cutlery Branch Should be thought worth attending to, Seven Eights of the forging & finishing may & Ought to be done by Water Works . . hammer Bellows & Grindstones ought all to Go by water. having dipt considerably in the manufacturing line before the Warr & having procured some information since the Naval office in this Town has been absorb'd in the district of New London and Loosing the little Living I received from the Office has induced me to make enquiry into the Nature and process in Manufacturing Several kinds of Goods, am fully Convinced the Articles I have mentioned and Sundry others may be made in this Country Cheaper & better than they can possibly be procured from any Other. you will if you think proper suggest some of these Ideas to the Secretary or suppress them & believe me very resepctfully

Your most Obedient Serv^t

CHRI^r LEFFINGWELL

Col^o Chester

[Addressed] The Hon^{ble} John Chester Esq^r
Weathersfield

[Endorsed] Christopher Leffingwell Esq^r
Norwich (N London County)
August 26th, 1791

(7)

CHRISTOPHER LEFFINGWELL to JOHN CHESTER, *on manufactures in Norwich, Ct.*

NORWICH 30th Aug^t 1791

Dear Sir

Since forwarding statement of Manufactories have discovered an Omission of the Manufacturing of Carding Machines and Jennys for Carding & Spinning on the large Scale those in M^r Lathrops works were wholly made here by an Inhabitant of this Town who is a Great Mechanical Genius —
Machines for Cutting doubling & Crooking Card wire for making Common Cotton & Wool Cards are also made in this

Town— Those at Philadelphia & Several in Boston were made by a Nathan Cobb of this place —

*I am your most Obed Sev^t

CHRIS LEFFINGWELL

Col^o Chester

[Addressed] Hon^{le} John Chester Esq^r

Weathersfield

[Endorsed] Christopher Leffingwell Esq^r

Norwich (N London County)

Aug^t 30th 1791

(8)

WILLIAM HILLHOUSE to JOHN CHESTER, *on manufactures near Montville, Ct.*

William Hillhouse was a graduate of Yale (1777), an able lawyer, and in 1792–1793 a member of the state legislature.

MONTVILLE Sep^r 6th 1791

Sir

As M^r Huntington and M^r Learned reside in the two principle Manufacturing Towns, and have Easy access to all the other Towns in the County of New London [I] Shall depend on their giving the information you Desire in respect to the Manufactures in them,

This Town is altogether in the Farming way, & little or nothing is done with us in the way of Trade or Manufacture Except for use of the Inhabitants, we have Blacksmiths, that do the Common work needfull for the Farmers, Shoemakers, Carpenters, Cloathiers¹ Necessary for the peoples Wants, The Familys [ma]ke¹ plain Cloth, Bearskin, Thin Cloth, & Linnen for Family use, They also make Check^d flanning & Tow Cloth, which the Women Barter with the Shopkeepers for Calicoes, Muslins, and other Female Clothing and ornaments, This Sir is near as I can recollect the State of the case with respect to us, and has been nearly the same for Years past.

It is Easy to Supply the flax for the linning Clothing as about half an Acre of flax Ground upon an Average will supply a sufficient Quantity of flax for all the Inhabitants of this State.

¹ Hole in the paper here.

The Woollen Manufacture, in this cold Climate, is an Important Object, which is not Easy to get a long with for Want of Wool. I have not made Exact Calculations But will suppose for Once, that to Cloathe the People of this State only, it will require a number of Sheep to be shorn Yearly not less than 1000,000 [sic] What the Number in the State was, the Last Deduction from the List I have forgot, but very short of the Number that is Wanted —

You have I believe, often heard it Mentioned that Two of the Most Material Objections to keeping Sheep are, In the first place Sheep are apt to be unruly and Troublesome, and in the Next place they will not pay the Expence of keeping Equall to other Stock, which is in a Measure True,

I know of no remedy for the last objection but for the Good People in their Patroism to Eat and Make away with as Much Lamb and Mutton Sheep as possible instead of other Meat, which would make such Demand for Sheep as would induce the raising them, for it is a Well None fact, that the Wool that is Shorn from the Sheep is no Compensation to the Farmer for keeping them, I could perhaps give you a more perticular Account (Why and Wherefore) but will Omit it not Doubting but you Well understand the Matter,

Something I believe might be done to better the Texture and Quality of the Wool. but that would need Encouragement as Course Wool is More profitably raised than fine, but Enough as I am not Certain that Your Enquiries lead to this Subject, however I will Suggest a remedy to the first objection to keeping Sheep, their being unruly, it is Easy to remedy it, Keep Your Sheep Well, attend to Your fences to keep them in repair and dont let Your Sheep Choose for themselves but Govern Them, and there is no more Deficulty in Managing Sheep than any other Stock, I am Sir with Great respect

and Consideration, Your
Most Obe^t Hum^e Serv^t

WILLIAM HILLHOUSE

The Honorable John Chester

[Addressed] Col^l John Chester

Weathersfield

[Endorsed] Hon William Hillhouse

Montville (New London County) Sep^r 6th 1791

(9)

JOSEPH P. COOKE to JOHN CHESTER, *on manufactures in and near Danbury, Ct.*

Joseph P. Cooke was a wealthy and influential merchant of Danbury, who was also active politically. He served as a member of the Connecticut General Assembly from 1763 to 1783, of the Governor's Council from 1784 to 1803, and of the national Congress from 1784 to 1788.

DANBURY *Sept*^r 12 1791

Sir

In pursuance of your request communicated in your letter the 10th ult. I have endeavoured to obtain the best information in my power respecting the several manufactures in the northern parts of the County of Fairfield, expecting you will receive from M^r Davenport all necessary information from the towns upon the Sea coast¹— The inland parts of this County, not yet overstocked with inhabitants, afford the people the means of persuing Agriculture very generally which is their favourite employment, consequently the spirit of manufacturing has not much prevailed, except in the domestic way; that however in the aggragate is very considerable, as their families are principally cloathed in their own manufactures, but to what amount cannot be ascertained with any degree of precision— Making of Nails is also become part of the trade of almost every blacksmith, whereby the importation of the article is entirely at an end— The manufacturing of Hats of all kinds is prosecuted upon a large scale in this town; from the factory of O. Burr and C^o which is probably the largest of the kind in this State, large quantities of hats are sent abroad, as also from several others, although to a much less amount. I took the liberty to communicate your letter to M^r White one of the partners of that company, and desired him to give such a Statement of their business as would correspond with your ideas; he engaged to do it; and I doubt not he will give a satisfactory account of this business, in a letter addressed to you, which I expect will accompany this.²

A Cotton manufacture has also been carried on in this town for about two years past, but not to any considerable degree;

¹ See letter of Davenport to Chester, pp. 36-37, below.

² See following letter from O. Burr & Co.

a company however has been formed the summer past for that purpose; they have purchased a Jenny for spinning and a Carding Machine, have manufactured several pieces of cloth which meet with a ready sale; the prospect is somewhat promising; the greatest difficulty at present is in procuring good workmen that will be steady in business.—

The manufacturing of Pot and Pearl Ashes is carried on in much the same manner as I suppose it is in other parts of the State, one or more works in almost every town; the owners complain of too great an interference in this business, perhaps some general regulations on that account might be proper.

The manufacturing of Bar Iron has made a rapid progress within a few years: four years ago there was not a single Forge for that purpose in this County, and I believe never was; within that time eight or nine Iron Works have been erected, in most of which there are two Forges producing upon a mean about twenty tons of bar iron annually, of which a large quantity, after supplying the home consumption which is very great, is exported to New York, where it meets with a quick market at about 70 dollars p ton. These works are supplied with Ore of a good quality from an inexhaustible Bed about seven miles from this town just within the limits of the State of New York. This important branch of business, being liable to many disasters, requires the unremitted exertions of the Proprietors, and demands public encouragement— A Slitting Mill has for some time been in contemplation, but nothing as yet done, such works would be of great utility to this part of the Country, but they ought not to be too frequent.

With great respect and esteem

I am Sir

your most obedient Servant

JOSEPH P. COOKE

Hon^{ble} John Chester

[Addressed] The Hon^{ble} John Chester Esquire
Wethersfield

[Endorsed] Hon^{ble} Joseph Platt Cooke.
Danbury (Fairfield County)
Sept 12th 1791 with a letter
from O Burr & Co: with samples¹

¹ These samples have not been preserved.

(10)

O. BURR & COMPANY to JOHN CHESTER, on hat manufacture
at Danbury, Ct.

Hon^{ble} J. Chester Esq^r

DANBURY Sep^r 12. 1791

Sir,

Your circular Letter of the 18th ult., desiring Information respecting the Kind & Progress of Manufactures, was handed to me by the Hon^{ble} Joseph P Cooke Esq^r & as You observe, that any Communication by Letter, will answer your Purpose, we have taken the Liberty of addressing this to You, stating the Rise & Progress of our Hat Manufactory, & that of the Saddle Cloth under the Care of Judson White—

And we have subjoined several Impediments under which we concieve, the Hat Manufactory labors.

Perhaps from local & contracted Views, we have not given the Subject that extensive Consideration, which it demands— If we have given any Hints which may be serviceable to the manufacturing Interest, our Purpose will be answered. Such as they are, we submit to your Candour.

We began the Hatting Business in Jan^{ry} 1787, with only one Journeyman & one Apprentice. You will see the Progress of it, by the Statement on the other Page [below]. We now employ seven Journeymen & ten Apprentices.

The Price affixed to each Quality of Hats, is at what they now sell by the Dozen, in Lawful Money.

	Felt Hats	Girls D ^o	plain Castors	Napt Korums	Beavers	Beaver- etts
1787	305	...	73	146	10	...
1788	450	4	50	408	8	17
1789	609	60	65	1104	47	6
1790	443	9	19	1862	85	...
1791	98	...	21	1629	30	...
<hr/>						
	1905 @ 5/	73 @ 7/6	228 @ 24/	5149 @ 15/	180 @ 39/	23 @ 30/
<hr/>						
	Plain Korums	Napt Castors		Ladies		
1787	17	...		...
1788	10	...		...
1789	14	11		...		
1790	..	99		...		
1791	..	180		237		
<hr/>						
	41 @ 10/	290 @ 24/		237 @ 15/		

The Article of Muskrats of which we use large Quantities in napping our Korum Hats, have advanced in Price within 15 or 16 Months 30 p Cent at least, & Hats have fallen in Market full 20 p Cent in the same Time, owing in a great measure to Persons setting up the Business who never served for the Trade, & not being Judges, have had Work done which goes to Market & has injured the Credit of American Hats very much, & must in time ruin it entirely, except Government adopts some method to prevent such injurious Practices, & make it necessary for Men to serve such a Number of Years as shall perfect them in the Business. Our Trade is not learned by Observation nor by mathematical Calculation, but by practical Experiments.

This Practice of setting up the Business without serving an Apprenticeship, has the hurtful Tendency to make Apprentices discontented in their Master's Service, as they see those who have not served at the Trade more than one or two Years, employed as Journeymen at full Wages in these Shops: therefore as soon as they have learned to form a Hat, they will say: "if we can by any means get clear of our Masters, we may be Journeymen on Wages too, as we can work as well as those who are employed by these Men".— Hence we see the great Propriety of the English Laws which no doubt have been the means of the Improvements which have brot their Manufactures to such Perfection¹.— What Improvement can be expected in a Shop where the only Person interested is ignorant of the Business?

The Rise of Stock & Fall of Hats, makes it necessary for us to enlarge our Business—& as Journeymen are scarce, we are obliged to take a Number of Apprentices; the Poll Tax on these will be a heavy Burden: add to this the Assessments on Mechanicks which the Listers think must be laid on, in Proportion to the Business appearing to be done.² Now as our Hats must be sold in New York by the Dozen, & the Price is from 30 to 50 p Cent. below what they are sold for by Retail at the Hatters Shops in the Country, this Assessment, you will readily see is very unequal on us —

¹ The reference here is probably to the Elizabethan statute regulating apprenticeship, which was passed in 1562. This act restricted the number of apprentices per master and fixed the period for learning the trade.

² These tax burdens are the same as those spoken of by Benjamin Huntington in his letter to Chester: see pp. 13-14, above.

The principal Reason of the high Price of Furrs, is our not having the Command of the Furr Trade; & a great Part of the Furrs which come into this Part of the Country is purchased in Canada by a Person in New York & shipped to England, & from thence to that City. And as there is no other Person in that Business at present, he is able to engross the whole of the Furrs, & command the Price —

Some kinds of Furrs are lately imported from Germany & other Parts of Europe, which we hope may be a Relief to us; & together with our Improvements in extending the Stock, will enable us to continue the Business to the Advantage of ourselves & Country, should Government make such Regulations as to encourage Improvements by those who are capable of making them, & prevent Practices which are hurtful to the Credit of the manufacturing Interest —

We are with great Respect, S^r Your

obed^t humble Serv^{ts}

O. BURR & C^o

Judson White began the Saddle Cloth Manufactory in Sept^r 1790. Since that Time he has manufactured 1258 Yards which sells from 3/6 to 3/9 p Yard by the Piece—Several Samples of which we inclose. As it is not convenient to send a Sample of the Hats, we would just inform You, that they may be seen either in our Shop in Danbury, or in New York, Maiden Lane, where we expect to open a shop sometime this Month

[Addressed] Hon^{ble} John Chester Esq^r
Wethersfield

[Endorsed] O Burr & Co Danbury
(in Fairfield County) Sept^r 12
With three samples of Cloths¹

¹ These samples of cloth apparently have been lost. They are not to be found with the Hamilton Papers in the Library of Congress.

(II)

CHAUNCEY WHITTELSEY to JOHN CHESTER, *on manufactures in Middlesex County, Ct.*

Chauncey Whittelsey was a graduate of Yale (1764), was appointed purchasing-clothier and later quartermaster-general for the state during the Revolution, and served in later years as member of the Connecticut General Assembly and as collector of the port of New Haven.

MIDDLETON *Sept*^r 27th 1791

Col: Chester
S^r

I have rec^d but two Letters in answer to those I wrote, in Consequence of your Application upon the Subject of Manufactures, one from Chatham, the other from Killingsworth; the one from Killingsworth was accompanied by one from M^r Elliot to M^r Lane, which I forward you as it contains some Information, upon the Subject of manufacturing Steel, which may eventually prove of some Consequence.¹

In the Town of Chatham are the two distilleries one of Rum, the other of Geneva, the one lattle [sic] set up, the other about eighteen Years since, but did but little, untill last year; when the former distilled about 30,000 Gals, the latter about 10,000. —There is likewise a forge for Iron, sett up thirty years agone, or more, but is at such a distance from the place of Landing, & the owners so poor, it is not carried on to very great Advantage, it produces but about twenty Tuns of Iron annually; which is sols for 25/. p^r hund^d There are two Quarries of Freestone, the one worked for a great Number of years, the other lately opened; from thence are obtained Stones for every use, for which those kind are proper, & which are there worked, for the various purposes for which designed. Perhaps it is the best Quarry in this part of America.

In this town is a Snuff Mill, first set to work last fall, which has done some Business; what it is [its] annuall produce will be is not easy to determine; the Snuff is sold in Bottles of half a pound each, for 30 Dol^{rs} p^r Gross; the works are carried on

¹ For this letter "from Killingsworth," see that reproduced immediately below (Lane to Whittelsey), following which is the letter from Elliott to Lane mentioned above. The other letter spoken of above, that "from Chatham," either was not transmitted or has since been lost.

under the protection of a Patent, granted to a Company at East Hartford.—

The Business of making pot & pearl Ashes, is carried on in several parts of this State; but as I have rec^d no particular Information, I can only observe, that in this Town one sett of works makes about five Tuns annually.

We have in this Town a Stock of about 250 £ L Money¹ employed in a Linnen Manufactory. It is a temporary Matter sett agoing about two Years & an half ago, for the purpose of an Experiment, by a Number of Subscribers; and will probably fail, when the term of their Subscription expires. The articles principally made, are coarse Linnens under the name of ozna-burghs, of which are made about 4000 Y^{ds} in a Year, which are sold on an Average @ 10^d p^r Y^d by the Bolt.

Checks sold @ 1/6 and upwards by the piece

Striped Linnens @ 1/6

Sheetings from 1/6 to 1/9

of the last Articles no large Quantities are made

The difficulty of disposing of the Goods for Cash in hand, & of getting a price that will afford a small profit on the Stock, is an embarrisement upon any Business of this kind.

Thro'out the County we are furnished with Tanners who supply Leather for almost if not quite every Use, for which it is wanted; This is wrought up by different Tradesmen, into the various Articles which are wanted by their several Customers, such as, Shoes, Boots, Saddles, Harnesses &c &c. Most of our riding Carriages are likewise made by our own Mekanicks.—

The Smiths supply us with Scythes & Axes, in Abundance; one Shop in this Town, turn out about one hundred Dozen of those Articles in a Year, which he sells for ten Dollars p^r dozen. this is done beside the other Smiths work, he carries on.

The Article of Nails is principally made among ourselves, and sold by retail at 9^d p^r lb.— The Business is carried on by our common Smiths, I am not acquainted with any, that make it their capital Object.

As to the domestic Manufactures from Woollen, Flax, Cotton, I can add nothing to the observations you read to me when last at your house; The Subject is such as not to admit of very

¹ Probably "Lawful Money".

exact Calculations, without more labour and expence than can be expected under present Circumstances. I can only observe in general, That our farmers are mostly clothed by the produce of their farms, improved by the labour of their Families; and those Woollens which are made in this [manner], are perhaps equal to any in the World, for the use of the day-Labourer. Considerable Quantities of Cloth are made for the purpose of barter; in that Way as well as for private Cloathing the Manufactures of this State, appear to be continually extending themselves.—

I omitted in its proper place to mention an Iron works in Killingsworth, set up in 1763 which manufactures about eight Tuns p^r Annum, and sells @ 30/. p^r C.— In the same Town are three Works for Pot and Pearl Ashes, which manufacture, one that was created in 1766, 3½ Tuns p^r Annum, one 1788, 26 Tuns, one lattley set up, has worked but one Tun.

I am S^r with Respect

Your obedient Humble Servant

CHAUNCEY WHITTELSEY

[Endorsed] Chauncey Whittlesey Esq^r
Middleton (Middlesex County)
Sep^t 27th 1791—enclosing a
letter from A Elliot—& H Lane Esq^{rs}

(12)

HEZEKIAH LANE to CHAUNCEY WHITTELSEY, *transmitting letter of AARON ELLIOTT.*

Hezekiah Lane was connected with the commissary work of equipping troops during the Revolutionary War; served in the legislature, colonial and state, for approximately twenty sessions; and in later life served as probate judge.

Sir

KILLINGWORTH Sept^r 16th 1791

Since writing the Letter respecting Manufactures I have received this which I send you for more particular Information about the Steel Works

HEZ^h LANE Esq

Chauncey Whittlesey Esq^r
Middletown

(13)

AARON ELLIOTT to HEZEKIAH LANE, on steel furnace at Killingworth, Ct. .

Aaron Elliott, the author of this letter, came of a family of iron workers. His grandfather, Jared Elliott, in 1762 had been granted a medal by the London Society of Arts for producing in a common bloomery forge a bar of iron from American black sand. His father, Colonel Aaron Elliott, continued in the work, as this letter itself indicates, turning his attention to the manufacture of "Blistered Steel." In addition, the Colonel is noteworthy for his services in the Revolutionary War, and for his membership in the Connecticut General Assembly over a period of nine sessions. (For some account of the Elliotts, see Swank, *Iron in All Ages*, pp. 97 and 288.)

KILLINGWORTH Sep^r 14th 1791

Sir

Agreeable to your request of information respecting the Steel Furnace, from the Supervisor of Middlesex County; for the information of the Secretary, of Congress; I would Observe

The Furnace, was built by My Father Col. Aaron Elliot, about Fivety, Years past, for the purpose of Manufacturing Blisterd Steel.¹ It was at first but small, for the sake of Experiment; afterwards enlarg^d, so as to contain about 25^{ct} (And was the only one in the New England States at the time of the act of Parlement prohibiting aney others being built)² And remained in that cituation untill the commencement of the War, between Great Britain, & the Colonies; at which time the demant became so great, that my Father found himself under the necessety of Inlarging it; which was accordingly done, so as to contain about 2 Tun 10 Ct— My Father, usd commonly to Manufacture, about 40. or 50. Tuns pr. Year: The price he commonly set at; was £ 42 Y: Mony pr Tun.³ It might now be afforded at £ 32, as I have made sundry improvements, & lately, at considerable expence, Inlarg^d the Works to contain 4 Tun, at a blast; & with but small additional expence in manufacring of it. And were there sufficient en-

¹ This letter apparently has disappeared.

² This refers to Act of Parliament passed in 1750 (23 George II, c. 24), which prohibited the further erection of slitting mills in the American Colonies.

³ "Y: Mony" refers to "York" or New York currency which at this time was much depreciated.

couragem^t might easily, inlarge it now so as to contain 10. or 12 Tun.—

As to encouragement from this State; there is none, of a bublik [sic] nature

My circumstances, are such, that I am not able, to carry it on extensively; I have manufaturd this Year 4 Ton only; but the Works, is capable of Turning out One Hundred Ton, with Ease, Yearly.—

As to Quality; I make Blister, & Forg^d [?] Steel, which answers well, for all kinds of Country use.— And had I encouragement, coud make German, Steel, equal in quality to any made in Germany—

In haste, am Sir, your Friend

& Humb Servt

AARON ELLIOTT

Hezekiah Lane Esq^r

[Addressed] Hezekiah Lane Esq

Killingworth

[Endorsed] Aaron Elliott Killingworth

(Middlesex County)

14th Sep^r 1791

(14)

AMASA LEARNED to JOHN CHESTER, *on manufactures in New London, Ct.*

Graduated from Yale in 1772, Amasa Learned studied theology and preached for a short time. He served in the Connecticut General Assembly in 1779, and 1785-1791, and in the federal House of Representatives from 1791 to 1795.

NEW LONDON 14th Sept^r 1791

Dear Sir,

Agreeably to your request, I have written to several Gentlemen in each Town, in this County, to collect and forward to you, before the 20th Septr, such information on the subject of Manufactures in their respective Towns as the Secretary required.—

The domestic manufactures of this Town are of the same kind that you find in every other Town; but rather inferior to most in quantity & quality— The incidental trades—such as Boat-building, sailmaking, Ropemaking, Blockmaking—&c. &c. varies as the Tide of Business ebbs or flows They need no laws directly in their favour, depending wholly on the State of Commerce— There are two Saddlers in this Town, who make about 500 Saddles each every year & as many bridles— The prices vary according to the quality from 8 dollars to 20— most of them are exported to the West Indies some to the southern States, where they meet the same wares from England— these manufacturers, suppose that the duty on imported Saddles is not sufficiently high Some Complaint there has been that the duty on tanned leather is too low¹— In the Island of Hispaniola from whence they formerly brought many raw hides— the tanning business has greatly increased & leather is imported instead of hides— I know of no other trades in this Town that labor under any impediment which it is in the power of Government to remove— to enter into a particular detail of all the incidental & domestic trades of this Town—of their origin, annual produce & State of improvement would be an arduous task and as useless as difficult—Norwich will be able to furnish more necessary information than all the rest of the County— I wrote to Col^o Leffingwell, Coit & Lathrop—Gentlemen deeply interested in Manufactures²—

with Sentiments of Esteem

Dear Sir, your obedt & hble Sevt

AMASA LEARNED

[Addressed]

The Hon^{ble} John Chester Esq^r
Weathersfield

[Endorsed]

Hon Amasa Learned
New London 14th Septr. 1791

¹ The duty on saddles and that on leather were both seven and a half per cent *ad valorem* under the tariff of 1790.

² See letters of Christopher Leffingwell, above, pp. 15-17.

(15)

JONATHAN PALMER, JR., to JOHN CHESTER, on manufactures
in Stonington, Ct.

STONINGTON *Sep^t* 15th A D 1791

Sir

At M^r Learned's request¹ with respect to Manufactures have to state to you, That we have No regular Establish^d Factories in this Town, and therefore no pecuniary Incouragements. Our Domestick [manufactures] Are Considerable but to what amount is very doubtfull, The business of Hattmaking has been caryed on long in this Town, but for about One Year has been followed with peculiar Attention And perseverance they Manufacture enough for the Use of the Town of different Qualities and which Are I think prefarable to y^e English These Hats are Caried, Many of them to different States in y^e Union for sale, but y^e Hatters Complain that foreign Importations Yet very Much Injure the business here— Cabinet making has been followed here time Immemorial and for many years sufficiently for y^e use of this Town and Considerable Ship^d to y^e southern States for sale— Our Wollen Manufactory is wholly of the family kind and Judge sufficient to furnish the Inhabitants, of there Corse wairing aparel, those of a fine Quality are chiefly of Foreign Inportation, of Coarse Lining in the family way we Manufacture sufficient for our own Inhabitants but our fine, as in the case of Wollen we Import from Forigners The above is the best Statement can at present make as particular valuations would be Intirely matter of Gess.—

Am Sir with Sentiments of Esteem & Friendship

Devotedly Yours

Col^o John Chester

JON^a PALMER JUNOR

[Addressed]

John Chester Esquire

Supervisor, State of

Connecticut

[Endorsed] Jonathan Palmer Jun^r

Esq^r Stonington (N London

County) 15th Sepr 1791

¹ See letter of Amasa Learned, just preceding.

(16)

ROGER NEWBERRY to JOHN CHESTER, on manufactures in Windsor, Ct.

After serving with distinction in the Revolutionary War, rising to the rank of general, Roger Newberry held many judicial offices under the State.

WINDSOR 16 Sept^r 1791

S^r

Since I received yours of the 10th of August My Son on whome my dependance has been has been sick and unable to assist me in my business, so that I have been unable to pay much Attention to the Subject of your letter— I have wrote to several Gentlemens but have rec^d no answer except from Alexander King Esq of suffield whose letter I herewith send you¹

The Manufactures of this Town are Mostly in the domestic way such as most of our coarse Woolens & Linnens, etc, and Linnens [?] We import none they are all of home manufacture as are all Linnens under 2/ per Yard, and notwithstanding the great increase of population there is not one quarter part of coarse imported Woollens used that there were four Years ago. Our Axes Scythes, Hoes, and many other of the large & heavier kind of edged tools are manufactured among our selves. The Prisons at New Gate² will probably manufacture from 15 to 20 Tons of Nails in a Year which are sold by large quantities at 6^d per pound, by retail at 7^d— There is usually in the country large quantities of Tow cloth from 1/ to 1/3 per yard made in the domestick way, brought to market and sent to the southern States, but this year there has been but little more made than is necessary for home consumption, owing I suppose to moderate crop of Flax last year and the great demand for that article for Sail Cloth and Cordage It is difficult to fix any time when the above mentioned Manufactures began, They have been gradually increasing ever since the first settlement of this Country, but have been rapidly improving ever since the commencement of the late War but more especially

¹ See letter of King to Newberry, which follows immediately.

² By an Act passed in May, 1790, "the Cavern in the Copper Mines in Granby" had been set aside and constituted a state prison: see *Laws of Connecticut* (1808), p. 527.

since the conclusion of it, and what further encouragement is necessary I am unable to say. The two [tow?] cloth is sold according to the labour and expence about it, very low, and I could wish some better encouragement might be given to that manufacture as it employs a great many women in the country. I am very sorry I have not been able to pay greater attention to the subject, as it is a subject of importance and in which this State is deeply interested. If I shall receive any Answers from the other Gentlemen to whom I have wrote I will forward them to you, and am

Your Obedient

Hum^{le} Serv^t

ROGER NEWBERRY

Hon^{le} John Chester Esq

[Endorsed] Hon Roger Newbury

Windsor (in Hartford County)

16th Sep^t 1791 Manufactures in Connt

(17)

ALEXANDER KING to ROGER NEWBERRY, *on manufactures in Hartford County, Ct.*

After graduating from Yale in 1759, Alexander King practiced medicine for many years in Suffield. From 1778 to 1784 he served as member of the Connecticut General Assembly.

SUFFIELD 12th Septem^r 1791

Sir

in Compliance with Your Request of 29th August last, I have sent as Accurate an Estimate as at present can be obtained of the state and produce of the Manufactures of this Town —

Wool—The Wollen Manufacture is the Principal and the most Beneficial to the Inhabitants of any that is carried on in this Place— there are in Suffield about 400 Families and about 5 Thousand grown Sheep, which will produce about 25 lb^{wt} to a Family on an Average this is all manufactured in the Domytic Way except Fulling and Dressing which is done at the Cloathiers Works

We have One Cloathier in Suffield who carried on a pretty large Branch of Bussiness in the year 1788 he fulled and Dressed 1500 y^{ds} of Wollen Cloath; besides Dying and pressing half as much More; in the Year past he has fulled & Dressed 3500 y^{ds} of Wollen and dyed and press^d about 1800 more which was not fulled; the Cloath thus made is consumed by the perticular Families who manufacture it— the late Premium granted by the Legislature of this State, has in my Opinion contributed to the Increase of Sheep,¹ they have doubled in Number in this Town in less than Four Years; and by proper Attention may Yet for a long Time become an increasing Source of Wealth to the Farmer and Manufacturer

Cotton—of this Article no great Quantities are manufactured in this Place. Some particular Families do a little

Flax—About 20 Thousand W^t of Flax is Annually manufactured in this Town which is Another important Article of Manufactures and is done like the Wool in the Domytic Way. The whole of this however is not the Produce of this Town, perhaps One Quarter is purchased from other Places, the usual price of Flax is from 4^d to 6^d pr lb

Hemp—the Culture of Hemp has been attempted this Year by some of Our Farmers, how it will produce or how far Succeed is yet unknown— the Growth of this year may be Eſtimated at Two Tuns —

Iron—there is a Forge for making Iron Shovels, the Plates are drawn under a Trip Hammer carried by Water two Workmen have made the Year past One Hundred Dozen. they compute Two & ½ Tuns of Iron and 2500 Bushels of Coal to make 100 Doz— the Owners are now erecting Works upon a larger Plan, to carry Three Trip hammers, they calculate to make 300 Dozen yearly for the future and intend to use better Iron than what was work^d last Year which was but indifferent—the Price from 7 to 9 Dollars per Doz —

Cotton & Wool Cards—M^r Thompson has lately set up making Cotton & Wool Cards in the Year past he has made about 12 Hundred pair, he intends to enlarge his Works and expects to make Three Thousand pair a Year —

¹ This “premium” apparently refers to a credit of four shillings per head of sheep granted taxpayers in the listing of their taxable property, while sheep up to twenty in number were exempted from executions: *Acts and Laws of Connecticut* (1786), p. 345.

Nails—Very little of this Bussiness is carried on here possibly a Tun of Nail Rods may be worked up in a Year —
Our Black Smiths furnish the Husbandry and Mechanic Tools for the Inhabitants

M^r Taylor is noted for making the best narrow Axes many of which are carried out of the State to Vermont, he makes about 300 a Year price 6/
about Ten Tuns of Iron is annually work^d up in Suffield & about 10 Thousand Bushels of Coal

Hides & Tallow—400 Head of Beef Cattle are commonly Bucher^d in Suffield Annually exclusive of those which are killed by perticular Families for their own Consumption the Hides are manufactured chiefly in Town M^r Phelps carries on a large Branch of Bussiness and has a very convenient Yard and proper Buildings for the Works, he Usually Tans about 600 grown Hides & 400 Calf skins besides Sheep and Other Skins. the Other Tanners in Town about 200 grown Hides and one Hun^d Calf Skins the price of Hides 2½^d calf Skins 5^d Soal Leather 1/3 pr H^{wt}

the Tallow is usually sold to the Tallow Chandlers and Soap Boilers in Hartford, fetches about 4^d

[word undecipherable] —

Saddles—there are made about¹ [] more than what the Inhabitants want for their own Use which are mostly sold out of the State

the Other Branches of Leather Manufactures are mostly made in Town & consumed by the Inhabitants —

Wool Hats—M^r Swan commonly manufactures 5 or 6 Hundred W^t of Wool into Hats yearly, he has made very considerable improvements in making Wool Hats, I have not seen Handsomer or better made Felt Hats either imported or manufactured in America, the price of Hatters Wool is about 2/3 pr H^{wt} Hats from 5/ to 12/

Potash—This Manufacture was early introduced into Suffield in the Year 1761 M^r Zuell and Others Co^y of Merchants in Glascow Scotland Erected Works in this Town to make Potash, which they managed pretty largely for some Years the Potash then made Sold for 60 £ Sterling pr Ton (whether the Bounty was included in that Sum I am not able to say)

¹ A blank space left in the Manuscript.

Since those works were thrown up the Bussiness has been carried on by some of the Inhabitants. to this Time it is computed about 600 Bushels of Ashes will make a Tun after the Old Manner & Process the New has never yet been tried here the Average price of Ashes about 7^d deliv^d at the Works they make about 5 Tons a Year which sells in New York for 30 or 31 lawful Money —

Lumber—Grangers & Ely Mill erected on the West Bank of Connecticutt River, saws about 300 Thousand feet of Boards Plank and Other Stuff a Year, there are 5 or 6 Other Mills in Town which All together probably saw half as much more, most of the Timber is white Pine floated down connecticut River in the Spring Freshets the average price of Boards about 33/ Lawful Mony pr Thousand 400 Thousand Shingles are made Annually from Lumber which comes down the River likeweys price about 12/ pr Thousand —

Wheel Carriages—Mr Dewey is noted for making the Best Wheels for Carriages of All Sorts, he makes some Chairs and Chaises every Year but generally this kind of Work is for the Use of the Inhabitants and Also y^e Cabinet work which is made in Town —

Casks—there may be a Thousand Casks made in Town Yearly besides what the inhabitants use for Cyder

Salt Petre—has been manufactured in the Time of the War, but is now imported cheaper than we can make it —

Earthen Ware—a Small Quantity of this Article is made in Town about 9 Kilns a Year valued at 12 £ pr Kiln this Bussiness was first set up here in 1782 —

Wooden Dishes—the Ancient Characteristic Manufacture of Suffield is Over— Our Materials are gone perhaps I have enumerated Articles in the foregoing Account which were not expected if so you will Use them or not according as you think proper— I am S^{ir} with Respect & Esteem
Your Humble Sev^t

ALEX^r KING

Hon^{ble} Roger Newberry Esquire

[Endorsed]

Alexander King Esq^r to

General Newberry—

Suffield (in Hartford County)

12th Sept 1791

(18)

JAMES DAVENPORT to JOHN CHESTER, *on manufactures in Fairfield County, Ct.*

James Davenport (Yale, 1777) studied law, and later was appointed judge of the court of common pleas. His public life was spent in Connecticut—as member of the General Assembly (1785–90) and of the Board of Assistants (1790–97)—although just before he died he was elected to the federal House of Representatives.

STAMFORD *Sept* 16th A D 1791

Sir

I am honored by the receipt of your Letter of the 10th Ult. in which you inform me of the request of the Secretary of the Treasury to have as accurate information as possible of the state of Manufactures of every kind in this State & desire me to collect & communicate to you information on the subject from this County—I should have answered your Letter sooner but absence from home prevented —

It is impossible to give you the Minute information you wish, but can generally inform you that domestic manufactures of Woolen Linnen & Cotton have since the conclusion of the war very greatly increased, I believe more than three fourths of that description of Goods used by the Inhabitants are manufactured in that way the fabricks are generally of the coarse kinds but are esteemed much better than those imported of the same degree of fineness & are made at less cost than the price of the imported Goods

A manufacture of Sail Cloth & Coarse Linnen was set up in this Town about two years since by Jn^o W^m Holly he has not carried it on very extensively but has manufactured in that period about Eight peices of Duck of Thirty Eight yards each the price of which has been from Eleven to twelve Dollars per peice he has also made about 14,000 yards of Osnaburghs & other linnen Cloth the prices at which it sold were various from Forty to twelve Cents— The manufacture of Nails is also carried on in this Town by Mr Jarvis it was begun about five years ago & ten Tons of Nails have been made per year & the same article has been manufactured in the town of Norwalk for

about Three years in greater quantities than in this Town by Parra¹ & Gruman

I know of no other manufactures but of the domestic kind in this County excepting at Danbury where the manufacture of Linnen & Cotton & Hatts is carried on Col Cook I suppose will give you particular information from thence

I ought to have mentioned that considerable quantities of linnen Cloth which sells for about 20 cents per yard are made in the domestic way in the County & sold in the southern States

I shall be glad if this information can be of any service to you & wish I could have been more particular the Subject is important & merits Legislative consideration & it will be peculiarly servicable to this State if Manufactures are properly encouraged

I have seen a plan (said to be the plan of the Secretary) for the incorporation of a Company with a Capital of 500.000 Dollars to be employed in the business of Manufactures & its operations are to be confined to one of the three States next south of this & New Jersey is to have the preference, why is New Jersey preferable to Connecticut for the carrying on such business²

I am with sentiments of esteem

& regard Sir your

most Obed^t servant

JAMES DAVENPORT

[Addressed] Hon. John Chester Esq
Wethersfield

[Endorsed] Hon James Davenport
Stamford (in Fairfield County)
Sept. 16th 1791

¹ Word almost illegible, possibly Burnet or Turrel. These names also appear in E. Hall's *History of Norwalk, 1650-1800*, pp. 217-279.

² See correspondence regarding this New Jersey enterprise, the "S.U.M.", reproduced below, Part IV.

(19)

JOHN TREADWELL to JOHN CHESTER, on manufactures in Farmington, Ct.

John Treadwell was a member of the Connecticut General Assembly 1776-1785, and of the Governor's Council 1785-1798. Later (1809-1811) he became governor of the state.

FARMINGTON, *Sept*r 21st 1791

Sir—

Pursuant to your request I wrote to a Gentleman in each of the towns of Southington Berlin and Bristol for the necessary information on the subject manufactures in those towns, but have received no answer except from M^r Andrews of Southington,¹ the account he has given and the estimates he has made I have reason to conclude are pretty correct, and with very little variation, as to common manufactures will apply to the towns of Berlin and Bristol whose circumstances are very similar to those of Southington regard being had to the number of inhabitants in the respective towns,—and indeed for substance will apply to this town, though I believe a greater proportion of foreign Cloths are used here than in those towns, and from a general view of the Subject I should conjecture that something more than one third of the whole expense of clothing the inhabitants of this town is laid out in foreign Articles —

The manufacture of articles of clothing in this town has hitherto been carried on in the family way chiefly and these manufactures particularly the woollen have of late, in some families attained a good degree of perfection the woollen manufactory at Hartford² has contributed much to the difusion of knowledge in this branch to the people particularly in the vicinity, and in that respect, at least, has been highly useful, but the woollen & cotton manufactures of various fabrics and various qualities are carried on with apparent success, by a M^r Brownson of this town as a regular trade— he has employed for a year or two past perhaps about fifty persons in his Business though not all or the most of them at his factory— he expects the present year to make about ten thousand Yards of

¹ See letter of E. Andrews to J. Treadwell which follows immediately below.

² Cf. letters of Peter and Elisha Colt, pp. 2-11, above.

cloth of woollen & cotton some of his fabrics are very fine and good, and generally his cloths, are found for service to excell those of like fineness that are imported, but he has not as yet been able to give them that complete finish which foreign cloths have, and consequently, they do not command that ready market in cash that imported cloths do, he finds a market for them however in the way of barter, but it commonly takes two or three turns before he can convert them into money and this is an inconvenience he cannot remove for want of proper machinery to give a high finish to his cloths, which his property will not enable him at present to procure—his profits however notwithstanding this disadvantage are sufficient to enable him to pursue the business, and he seems to be in a state of gradual progression towards perfection.—

M^r Martin Bull of this Town a Goldsmith about two years past set up the manufacture of Coat buttons being I suppose the first who has set up the business in this State, this manufacture is in its infancy but is however by no means unworthy of Notice in its present state, the buttons are made of hardned tin, very serviceable and of a good appearance, and in no respect inferiour to a great proportion of imported buttons, he has made several thousand dozen, and informs me that a boy of sixteen may make 200 Gross in a year, the profits would be considerable were it not for the exceeding [low?]¹ price of some of the Matthewman buttons imported [from]¹ Europe— he can afford them for 10/ pr gross for co[at &]¹ for vest buttons but it seems the Merchant will not take large quantities at that price as imported ones are something cheaper, a sample of the buttons is inclosed.—

The manufacture of Hats is about to be carried on here upon a pretty large Scale about twenty persons are expected to be employed in the House erected for that purpose but what success the Undertakers will have is uncertain the furr branch of that business be sure labours under great embarrassments at present which cannot be removed without the aid of Government, whatever may be done with it.—

Since the receipt of your Letter I have been wholly occupied in business I was appointed to do by the General Assembly in October last, and on that account have found it

¹ Manuscript torn.

impracticable to pay that attention to this Subject, which was necessary to afford you the expected information or to do it within the time requested, add to this the failure of two of the Gentlemen to whom I wrote for information, I presume it will not be thought strange that the Information I am able to give you on the Subject is so very imperfect.

I am

Sir

your most obed^t humb^e Serv^t

JOHN TREADWELL

[Addressed] The Honourable John Chester
Weathersfield

[Endorsed]

Hon John Treadwell
Farmington (Hartford County)
Sept. 21, 1791 Enclosing a Letter
from Elezer Andrus & a sample of
Buttons made by Mr Bull¹

(20)

ELEZUR ANDREWS to JOHN TREADWELL, *on manufactures in Southington, Ct.*

SOUTHINGTON, *Septem^r 14th 1791*

Sir

Agreeable to your Request I have endeavoured to obtain such knowledge as to give you as Just a Statement as I possibly could as to the Manufactures in this Town

It is not in my power to give you accurate account as I could wish— The greatest part of Woolen & Linen Cloaths wore in this Town are Manufactured by different Families in this place— (A very small proportion of Foreign cloaths are made use of) Silk is made by a number of Families in this Town— Hatts Chiefly wore by the Inhabitants are made in Town Boots and shoes are mostly made of Leather Tanned in Town and by Shomakers who reside here— We have an Oil

¹ This "sample of Buttons", like most of the other sample products transmitted to Hamilton, has been lost.

Mill nearly compleated owned by Mr Asa Barns which I believe will make a very considerable of oil from Flaxseed—

I have made an estimate not fully found on my own Judgment but the opinion of some Others of the undermentioned articles Manufactured in this Town & their prices —

2000 yards full ^d	Cloath	.....	at	4/6
1800 D ^o not full ^d	D ^o	.....		2/
6000 D ^o Linen	D ^o	.....		1/2
800 Hatts	D ^o	.....	at	6/—
80 p. Boots		.....		24/
2000 p ^r Shoes great & small		.....	a	5/
1000 runs Silk		.....	a	

I am Sir with Respect your hum^e serv^t

E ANDREWS

[Addressed]

The Hon^{ble} John Treadwell Esq^r
To the care of Farmington
Deacon Seth Lee
who is desired to
send this to Esq. Treadwell
this day and oblige his friend Elezur Andrews

[Endorsed]

Elezur Andrews Letter to
J. Treadwell Esq^r dated South-
ington in Hartford County
14th Sep^t 1791

(21)

WILLIAM WILLIAMS to JOHN CHESTER, on manufactures in
Windham County, Ct.

William Williams (Harvard, 1747) was a signer of the Declaration of Independence and a member of the Continental Congress. Later—1780 to 1804—he served as a member of the Connecticut upper house, the Governor's Council.

LEBANON 29 Sep^r 1791

Sir

In answer to your Letter of y^e 10th Aug^t Ult^o thro the multiplicity of Business and avocations, I am able to give you a very

imperfect account of Manufactures in this County, & I suppose quite inadequate to the Secretarys Wishes there are manufactures of Linnen Cloths carried on in very many Families in this Town & County, & large quantities are made, many private Looms for weaving in Families besides what is wove by those whose stated business it is, the Cloths are of perhaps every quality below superfine, & are sold at about the prices which foreign Linnens of the same fineness are, but generally more durable. Also large quantities of wool is spun up in Families, & dressed & prepared by the Clothiers of which there are three or four in this Town, & y^e same proportion I believe in other Towns of y^e County of Windham. the Cloths are of good qualities & various, most of them of the midling kind, very durable; Coulours fixed & handsome of almost every hue are given them by the Dyers, there is one Cargile at Pomfret who carried on the Clothier Business to a very considerable degree, one Cordall at Killingley they manufacture large quantities of Woollen Cloths, many of them in Colour & quality fit for Gentlemen of any Character, also at Durham & most other Towns, Workmen who have considerable skill in the business, these Cloths considering their quality & durability are sold lower than imported Cloths, the particular quantities it is impossible for me to ascertain, without more time & expence than can be afforded by one who has spent almost all his hitherto Life in public Service with little emolument to himself thereby. the high price of Labour & plenty of Lands prevent greater progress & perfection in these & other varieties of manufactures. what is done in this County is by Individuals at their own Cost & risque. the Gen^l Assembly granted a small Lottery for the encouragement of Cordalls Works, which I believe is not yet drawn¹ The Silk manufacture in this County is principally at Mansfield the best Information I can give you respecting that & sample of y^e work, is contained in a Letter from Cons^{nt} Southworth Esq. which is inclosed.² there is a Cotton manufacture in this Town set up about a year since by Maj^r Tilden & 2 or 3 Partners they have made considerable quantities of Fustian, Jeans & various Cloths, equal in Color & quality to the wishes of y^e Consumers, They

¹ Cf. letter of P. Colt to J. Chester, above, p. 5.

² This letter of C. Southworth to W. Williams follows immediately below.

are not deficient in Pride & ambition, they are wrought [?] more durable than imported of the same quality, & are sold rather under. they have no public encouragement, & I fear will not be able to prosecute the business, to advantage much longer, without some public aid, their Buildings & Machinery having been expensive, & they not yet sufficiently furnished.

There [are]¹ also almost every kind of Handy Crafts men among Us professing the several Trades, edge Tools of every kind are made in great perfection. &c the prices of all kinds of manufactures are very much governed by that of imported, as the makers (think they) can't afford their articles under & cant get more.

I had y^e fullest Assurance fr Col Grosvenor of a particular Information relative to Cargill & Cordalls Woolen Factories, & have delayed writing You on y^t Ass^e in daily expectation of it, but have yet received nothing.

all the Information I am able to give at present will be of little advantage to the Secretary I trust, but I hope & doubt not, but w[hat]¹ he will obtain, aided by his own Genius [&]¹ penetration will enable him to make a Report as satisfactory & useful & acceptable as they have hitherto been

I am Sir with esteem & regard, your

most obed^t & very humble Servant

W^m WILLIAMS

Hon^{ble} Jn^o Chester Esq^r

[Addressed] The Honorable

John Chester Esquire

Wethersfield

[Endorsed] Hon. William Williams

Lebanon (Windham County)

29th Sept. 1791 Enclosing

a letter from C. Southworth

Esq^r with samples of Silk

¹ Manuscript worn.

(22)

CONSTANT SOUTHWORTH to WILLIAM WILLIAMS, on manufactures near Mansfield, Ct.

Constant Southworth was inspector of saltpeter and powder during the Revolutionary War, and served as member of the Connecticut legislature from 1770 to 1779.

MANSFIELD Sept^r 1st 1791

Sir

The manufactures carried on in this Town are in the domestic way, and differ very little from those of other Towns in the County, except in the Article of Silk; Woollens and Linens are made here in most Families for domestic Use, and are many of them nearly equal in beauty to European Cloths of the second rate, and far exceed them in strength and durability.

The culture of the Mulberry tree and raising of Silk has been attended to, by a considerable number of people in this Town for some years past—it was first set on foot by Mess^{rs} Hanks and Aspenwall, natives of this place, who became inspired with a sort of Agricultural enthusiasm, on reading the late Doc^t Elliots Treatise on Field Husbandry¹—with great pains and after many disappointments they at length introduced the White Mulberry, which is now cultivated with great facility in a high and free Soil; low and marshy ground being unfavourable to this tree, by its exposure to the late, and early frosts in Spring and Autumn, which prove fatal oftener than the severity of Winter; there is made in this town the present year about Two hundred—pounds weight of raw silk after being properly wound from the Cocoons and dried; on which there is a Bounty given by Government of two pence per Ounce, to continue to the year 1794² the business of Winding, or as it is commonly called reeling the silk, is now well understood, though at first it was very indifferently performed—Silk is made from twelve pounds weight in a family, down to the Smallest quantity, without much detriment to other Business; two or three weeks however of laborious exercise, and strict attention is necessary,

¹ This apparently refers to Dr. Jared Elliott's *New England Husbandry or Essays on Agriculture*, published in 1747. This book is called by Carrier "the beginning of our agricultural literature" (*Beginnings of Agriculture in America*, p. 229). Dr. Elliott was grandfather of the Aaron Elliott whose letter appears above, pp. 27-28.

² *Connecticut Acts and Laws*, 1784, p. 282.

for those who raise the largest Quantities The Silk is of a good Quality, and might be wrought into the most Useful and elegant fabrics in the Silk way, could persons skilled in the business be Obtained—by the force of genius and application *some* have been produced; particularly handkerchiefs of the Barcelona Wale, Buttons in imitation of the Imperial, and ribbands of the Padusoy kind, all of which are very durable— As you Sir desire this information for the benefit of the Secretary of the Treasury of the United States, I have inclosed a sample of the Sewing Silk and buttons, into the former of which the raw silk is chiefly manufactured, and sold at much the same price with that imported. A number of persons concerned in this business applied to the Legislature of this State and Obtained a Charter of Incorporation in 1789 with ample powers; and exemption from taxation of public Works they might erect, for the term of twelve years—under the Name and Firm of the “Directors, Inspectors and Company, of the Connecticut Society of Silk Manufacturers.”¹ no special advantage can be derived from this grant, however generous, until workmen can be obtained Skilled at least in some one branch of the silk manufacture, I imagine *that* of Stockings would be the most advantagious as the Silk is capable of being so wrought as to make them both elegant and serviceable, and I think there are few gentlemen who would not be fond of Wearing American silk in that way— I have not a sample of the ribband by me, but you may be assured sir that it is the most durable of any thing possible that can be wrought, which has flexibility enough in it, to tie up the hair, for which purpose they are worn by the Honorable M^r Wadsworth Representative in Congress,² and by the Hon^{ble} M^r Chester and other gentlemen in this State

The culture of the Mulberry tree is increasing, and I believe it would be very easy in a few years for most families in this State to produce annually each One pound weight of raw silk without injury to other domestic business, *this* with the larger quantities that would naturally be raised by many,

¹ See Bishop, *History of American Manufactures*, vol. I, p. 361, and Davis, *op. cit.*, vol. II, pp. 270, 315-316.

² This refers to Hon. Jeremiah Wadsworth, wealthy Hartford merchant, for some years member of Congress.

whose situation was favourable in a particular degree, would find employment for Some, and amusement for others, and supersede the necessity of importing an Article which has long drained this State of her money and richest commodities. but you will pardon me Sir for presuming to hazard any Opinions on a Subject so diffuse, and be pleased to accept the above Information from

Sir your most Obedient

and very humble servant—

CONSTANT SOUTHWORTH

Honorable William Williams Esq^r

[Endorsed]

Constant Southworth Esq^r

to

Hon W^m Williams, dated Sep 1 1791

Mansfield (Windham County)

With two samples of Silk^s

Estab^t of Silk manufacy

(23)

JOHN MIX, JR., to JOHN CHESTER, on button manufacture
at New Haven, Ct.

NEW HAVEN October 5th 1791

Respected Sir

I had the Honour of receiving a Letter From you Dated 15th of September, 1791 In which you are pleas^d to inform me of the Desire of the Secretary of the Treasury to be Inform^d Relative to the different Manufactories which are carried on in this State, and as Sir the object of your writing me is with regard to the Button Manufactory in which I am Engaged. . . I have therefore Sir herewith Inclosed a short detail with regard to my first motives of Seting up the business of the Progress of the same and the Quantity and Quality made at different Periods, and the main Obstacles that appear to me to be a

^s These samples apparently have been lost. There are none with the Hamilton Papers now in the Library of Congress. However, see reference to this silk manufacture in Hamilton's Report, pp. 314-315, below.

great Barr and almost unsurmountable difficulty of Bringing the Button Manufactory to great Perfection. I have also herewith Inclos^d a Sample of the Buttons that are made at our Factory and the Number and Prises. I have not sent a Sample of Each Number that we make, but such a number of them that any Person will have an Idea of the Sorts & Sizes there made If Sir I have hereby Communicated anything that will be Serviceable to my Country and Acceptable to you and the Secretary of the Treasury I shall think myself amply compensated for the Trouble

I am Sir with Esteem and Respect Your most
Obedient and very humble servant

JOHN MIX JUN^r

Honour^{le} John Chester Esq^r

[Addressed]

Honor^{le}

John Chester Esq^r

Present

[Endorsed]

John Mix New Haven

Sep^t 20th & Oct. 5th 1791

with samples of Buttons

[ENCLOSURE]

NEW HAVEN *September 30th 1791*

Sir/

I was not bread up to any Mechanical Business, but had part of an Education at Yale College. After I left College I entered into the Mercantile Line, but Just at that time the War Comeing on I entered into the Service with a Commition in which I remained untill my Ill State of health oblided me to Quit the Service Being ever a Freind and Supporter of the Rights of my Country and finding agriculture and Manufactories must be the main Supporters of the Country, I applyed my attention to find out some kind of Manufactories that had not met with the perticuler attention of the Publick.

In September 1789 I accidentally Cast my Eye on a Perticular hard metal Button; after Examination of it I was fully Persuaded in my own mind that I could find out the Com-

position, and that they might be made to advantage/ I soon after this Communicated my Ideas with regard to this kind of Buttons to a M^r Bradley of this Town, not haveing the Button at that time I attempted to give him a Description of the kind, but he Endeavoured to discourage me with regard to the attempt, telling me that Mettal Buttons was Imported from Europe so Low that I could not find my Account in it. But this so far from discouraging me that it servd to Stimulate me to Attempt it. Some time in October following I Procured a Sample of those kind of Buttons which I shewed to M^r Bradley (he being Skill^d in Metals) and after close Examination on the Subject he came fully into my Opinion and said he did not doubt but they Could be made to good advantage and that he would assist me, and that he would make Experiments with me which we accordingly did. We pursued different Experiments and methods with regard to the Composition from October 1789 to the December following, when after the Numberless & unwearied Prossesses we at length hitt on the right Composition, the Next matter was to form a method to make them, and to Construct machienery for the finishing, which we accomplished in a very Imperfect manner, and the first Buttons that we were able to make for Sale was on the 23rd of February 1790—I then undertook the Business by myself and I proseaded and made from time to time as Follows.—

		GROSS	DOZ,
From the 23 rd of February 1790 to the 8 th of March was made 12 Gross of Vest Buttons & 3 Gross of Coat D ^o		15	
	GROSS	GROSS	
From the 8 th March to 21 st April was made	33 Vest 16 Coat	49	
To the 31 st of may was made 51 Gross [& 6 Doz.] ¹		51	6
To the 30 of June D ^o	69 & 4 Dozs	69	4
To the 31 of July D ^o	137 & 9 Doz	137	9
In the month of August	199	199	
In the month of September	279	279	
In the month of October	259½	259	6
In the month of November	286 9	286	9
In the month of December	297 8	297	8
In January 1791	218 6	218	6
To the 14 th February	84	84	

1947

¹ Not in the manuscript, but implied by the computation.

The above Buttons would average about One Dollar & 1 Third per Gross

Nineteen Hundred & forty Seven Gross I made as above while I carried on the works without any Partner from the 23rd of February 1790 to the 14th of February 1791, When I took in as Partners with me M^r Norman [?] Barney & a Brother of Mine M^r Jonathan Mix. under the Firm of Mix Barney & Co —In which Firm we continued to do Business with about (for the most Part) Twelve workmen Constantly Employed untill the 14th of August Last in which time there was made in Said Factory Twelve Hundred & Seventy Nine Gross of Buttons which would average about One Dollar and a half Per Gross and Seventy five Gross of Skelton Rim^d Buttons which would average Three Dollars and Two thirds per Gross— We here found that the Business Could be managed by Two of the Partners without the third

My Brother M^r Jonathan Mix & myself made a Proposal to M^r Barney that we would Purchase all his Right Tittle & Interest in and unto all the Stock tools & Apparatus of Said Factory. M^r Barney then made us an Offer what he would Sell for, and we Paid him accordingly and took the works to our Selves. The Factory is now Carried on by us under the Firm of John & Jonathan Mix, we have had made since the 14th of August to the first of October 479 Gross of Buttons which would average about One Dollar & a half per Gross —

Sir as to the advantages or Incouragement of making Buttons I would Answer

Viz we have ever found a market for what Buttons we Could make at some price or other; but the greatest difficulty Lies in not geting so good Pay as we could wish; the Reason is this there is such an amazing Quantity of Buttons Imported that the Importer will dispose of them at a very low rate for Cash and the retailer in general sells his goods for Produce; therefore he will not give us our Price, in Cash, we are Oblidged to Sell [for]¹ or Rather Barter away our Buttons for articles which we are oblidged to make a very great discount to get them Into money again in order to Purchase Stock, for we

¹ This word is badly smudged in the manuscript. Probably the writer intended to strike it out.

Cannot Purchase one Oz of Stock without money The Buttons that we manufactor are universally approved of and by Tryal are daily Proved to be Preferable to the Imported Buttons

The greatest discouragement that at present appears to us, is that In Europe they have been apprised of our Manufacturing buttons in America and Even Samples to my knowledge have been Carried to Europe of Buttons made in My Factory, they are now Sending over great Quantities which are Sold of the latest Importation for one Third less than what they were Sold for one Twelvemonth Past—

We therefore Earnestly wish and hope that Congress would Early in their Approaching Session take up the Matter with Sperit and resolution and Lay such heavy Duties on the Article of Buttons that it will amount to a Prohibition of Importing Buttons into this Country. We shall then be able to Enlarge our Button Factory in a Very advantagious and Exstensive manner boath for the Publick Benefit and our Own advantage. We herewith Inclose a Sample of Such Buttons as are made in our Factory. we are now able to Turn out upwards of Two Hundred different Sort Sizes & Figures we have about a Dozen of Workmen Constantly Impleyed and are daily making Improvements. In a word with Proper Incouragements from Congress in the Prohibition of Importing Buttons &c &c &c we should Soon Inlarge our Factory so that we would be able to Turn out upwards of Four thousand Pound Sterling worth of Buttons Yearly

JOHN & JONATHAN MIX

I am with Esteem Your most Obedientt & very

Humble servant

JOHN MIX JUN^r

The Honourable John Chester Esq^r

(24)

JOHN MIX, JR., to JOHN CHESTER, *giving further information on button manufacture at New Haven, Ct.*

Respected Sir

NEW HAVEN October 7th 1791

Being in a very Great hurry and a Croud of business I did not give You so Peticuler an account of the Skelleton Rim^d

Buttons (when I wrote you on the subject of the Button Manufactory) as I could have wished. I therefore take this Opportunity to inform you Sir—

The Skelleton Rim^d Buttons are of those kind which I gave you a Sample of, some with Cloath with white Rims, and some with Yellow, and some White Hard metal Buttons with white Rims, and some with Yellow. they are a kind of Button much Approved of, by the first Class of People, and are used on Superfine and Medling Cloaths The Manufacturing of them is attended with a Considerable Expence and I never have heard of their being made in any other Button Factory on the Continent of America but ours The groundwork of these kind of Buttons are made much in the same manner as our Common white metal Buttons are But the makeing of the Rimms is attended with much the greatest Labour the white Rimms are made with Silver Plated on Copper which is thick, this goes through the Plating Mill a great number of times untill it is very thin then Mashienery is Constructed for Cuting out the rims another for Raising them and a second & third and so on that the Button and Rimm is carried through upwards of Twenty hands or otherwise handled as many times, before it is fit for Market, the Stock is but trifeling the Labor and Mashienery is much the greatest on those Kind of Buttons. the Yellow Rim^d is much the same Except Putting on the Silver on to the Copper we are now Enlarging this Branch of Buttons and mean to Carry it on Exstensively with the Others. if we can have Incouragement it must of Course be a great Saving to the Country by keeping the money with us which Otherwise would be sent away in Large Quantities for the high pris^d Buttons which are not equal in Beauty goodness & Duration to those we make. there has been great Quantities of Rim^d Buttons Import from Europe which have been Sold for One Dollar & a Quarter per Dozen (Coat Buttons) which are far Inferior to ours of the Same Kind which we Sell for Six Dollars per Gross —

Sir I would Likewise Inform you that we are making Preparations for Manufactorying the Common Horn Button, and the Best kind of Horn Buttons. Also the Paper Japan^d Button we have a Person Lately from Europe who has the Skill perfectly who is a Gentleman who is able and has Engaged to

Instruct and teach us every thing Necessary in the making of them, and the Constructing the Tools and Apparatus to Carry on the same to advantage. Provided we Can have the Patronage and Support of Government

P. S. For perticuler reasons I said nothing to you Sir on the Subject of the Last mentiond Buttons, neether would I wish to have it Communicated at present to any this Side of New York

I am Sir with Esteem and Respect, Your most
Obedient & very Humble servant

JOHN MIX JUN^r

Hon^{le} John Chester Esq^r

[Addressed]

Paid

Hono^{ble} John Chester Esq^r
Weathersfield

on Publick Business

[Endorsed] John Mix New Haven

October 7th 1791

(25)

JOHN MIX, JR., to JOHN CHESTER, *on the possibility of a government contract for buttons.*

NEWHAVEN October 8th 1791.

Sir

Doubtless you may remember that I mentioned a word to you at my house with regard to my Supplying the Federal Army with Buttons from our Factory, and that I wished for your Patronage and Influence in the matter. If Sir it is agreeable to you to mention the matter to the Secretary, I should take it as a favour We should be able to Furnish at a very reasonable rate, and would put U S A on Each Button or any other figure or Divise that Should be required I am with Esteem &c &c Yours

JOHN MIX JUN^r

Hon John Chester

Delaware

(26)

RETURN of MANUFACTURES near *Wilmington, Delaware.*Return of Manufactories, Tradesmen &c in Wilmington
Delaware & its vicinity including Brandywine Mills

	N ^o of Mills &c	N ^o of Men	Remarks
Merchant Mills	12	45	
Saw Mills	6	12	
Paper Mills	1	25	Including Women
Slitting Mills	1	16	including wagoners
Barley Mills for shelling barley	1	3	
Coopers		59	
Printers & Book binders		30	
Carpenters		42	
Joiners		9	
Brick Layers		15	
Brick Makers		17	
Black Smiths		28	
Silver Smiths		7	
Taylors		36	
Weavers		22	
Wool & Cotton Card makers		55	includes women & children
Shoe & Boot makers		42	
Watch & Clock makers		5	
Spining Wheel & Chair Makers		13	
Carriage Makers		22	
Pump & Block Makers		4	
Boat Builders		3	
Ship Carpenters		6	
Comb Makers		4	
Hatt Makers		28	
Snuff Mills	1	2	
		552	Total employd

Coll^r Office D. D. [District of Delaware]Novem^r 28th 1791GEO. BUSH COLL^R Dist of Delaware

[Covering page] Manufacturers of Wilmington

Massachusetts

(27)

JOSEPH DANA to GEORGE CABOT, *on lace manufacture at Ipswich, Mass.*

Joseph Dana (Yale, 1760) was a clergyman located at Ipswich from 1765 till his death in 1827. George Cabot was a prosperous Beverly merchant and shipowner who, as his letter to Hamilton indicates (cf. below, pp. 61), early became interested in the cotton manufacture at Beverly, Massachusetts. In addition to his commercial and industrial activities, Cabot is noteworthy as prominent in Massachusetts political affairs from 1775 on, and as United States senator from 1791 to 1796.

It may be remarked that this letter to Cabot anticipates by nearly a year the general inquiry which Hamilton sent out before he drafted the Report on Manufactures. Possibly Cabot forwarded it to his friend, Hamilton, and the latter made further inquiry through Tench Coxe, then Assistant Secretary of the Treasury, which resulted in the letter from Cabot to Coxe, which is reproduced immediately below this of Dana to Cabot. Hamilton makes specific mention of this Ipswich lace manufacture in his Report (see p. 315, below).

Sir,

IPSWICH, July 26th 1790

At first receiving your fav^r of June 17th I indulged the hope of transmitting in a short time the desired intelligence from this town; and therefore did not write immediately; as it seemed more agreeable to make answer by doings than by promises.

But as the business will require more time than was at first apprehended; this line, Sir, will acquaint you that I am attending to it, as my moments of leisure will allow; and endeavouring to engage as many others in it, as will be accurate in the parts which they undertake.— And this is done the more cheerfully, as from the channel in which the proposition comes to us, as well as from the source where it originates, we have full confidence, that the ultimate object is to befriend the manufacturers of our country, and not to take advantage of them.

There are indeed—(unless we number the common mechanical arts, which, I conceive, is not the intention) There are, within my knowledge, not more than two kinds of manufacture in this town. The one is of Cordage (in the parish of Chebacco), of which I hope to receive a seasonable return.— The other

is of Lace; the machinery, indeed very simple—consisting only of a round or perhaps elliptical pillow, from 8 to 12 inches diameter; a strip of parchment or paste-board, encircling the same,—(upon which the pattern of the lace is pricked out)—a few rows of pins; and bobbins—from a dozen to 120, according to the width & figure of the pattern.— But the work itself is in a dispersed Situation; there being in the different parts of this town, probably not less than 600 persons who do more or less in it; some devoting y^e most of their time to it; others, little intervals only: some employed in the smaller patterns, others in the larger and more complex; and all independent of each other—So that to ascertain “the quantity and value of the annual finished work,” is an undertaking of some difficulty.

We are willing nevertheless, to be at some pains for the purpose; as it is probable y^t¹ this manufacture would be most worthy of some attention, if it's magnitude were known—with the height to which it is carried in many instances—and the perfection to which the whole might arrive, by a little encouragement^t.

As early, Sir, as circumstances will admit, You will receive the result of our enquiries. In the mean time I subscribe, with every sentiment of esteem & veneration,

Sir,

Your very obedient

and humble Servant

JOSEPH DANA

Honorable Mr Cabot

[Addressed]

The Honorable
George Cabot Esq
Beverly

¹ “yt”, is an old form of the word “that”.

(28)

Letter of GEORGE CABOT to TENCH COXE [?], on lace manufacture in Massachusetts.

Jan. 24 1791

Sir

in various parts of Mass^{ts} the Females make Lace & edging for their own use & some small parcels for sale—but I believe the manufacture has nowhere become of sufficient consequence to attract notice except at Ipswich —

the papers & specimens herewith handed¹ you will enable you to form a good idea of the business as it is carried on at that place —

I understand that the work is performed altogether by Women & Girls & that it occupies only (or chiefly) such portions of time as can be well spared from the concerns of the family—I beg you to call on me *freely* for any purposes in which I can be useful assured that I am in truth

your Friend, & mo. ob^t Servant

friday morn^s

GEO CABOT

M^r Cox²

[Endorsed]

Massachusetts lace
manufactory 1791

(29)

JOSEPH DANA to GEORGE CABOT, on lace manufacture at Ipswich.

IPSWICH, Jan. 24th 1791

Sir,

The inclosed return of the Ipswich Lace manufacture, has been ready more than three months, and only waiting to be accompanied by the Acc^t of looms, weaving &c. which, altho made out in part, is not yet compleated throughout the town.

¹ Apparently this refers to the letter of Joseph Dana to George Cabot, reproduced immediately below) and to the samples which originally accompanied that letter and which are still preserved with the Hamilton Papers at the Library of Congress.

² Probably Mr. Tench Coxe, then Assistant Secretary of the Treasury, and afterwards a prolific writer on American industrial and commercial conditions.

The Acc^t now transmitted, I believe to be a candid one; and as exact as recollection could make it: Most of the families were waited upon twice, by the young ladies who undertook this enquiry.

You will receive, Sir, with this, some specimens of the work; And if returns are to be made to the Secretary of the Treasury by way of the Academy,¹ it is asked as an indulgence, that these specimens, after being inspected by that honorable Body, may pass on, under their direction, so as to be ultimately presented to the beloved President of the United States, and to his Consort.—

If things fall out otherwise, And returns are not to be made thro' the Academy, within a short time; it is requested, Sir, that in that case, the patterns may remain in your hands; And that your friendship to the manufacturers of our country, may induce you to accept the obliging office of presenting them, as before mentioned, when you shall go to the Seat of the Federal government.

On the latter supposition, there may be opp^o for some of us to wait on you with our wishes upon this subject; As I should have done at this time, had not special engagements put it out of my power.— I am, Sir, with the highest respect,

Your very obedient

and humble Servant,

JOSEPH DANA.

Honorable Mr Cabot.

[Addressed]

The Honorable
George Cabot Esq^r
Beverly

[Endorsed] 1791

Lace Manufactory at
Ipswich Massachusetts

¹ Apparently this refers to the American Academy of Arts and Sciences, which was incorporated in Boston in 1780, and has had a continuous existence to the present day. James Bowdoin, Governor of Massachusetts, was the first President of the Academy.

[ENCLOSURE]

A Return of Lace and Edging, manufactured in the Town of Ipswich, from August 1789 to August 1790—: With the Value of the whole, computed from the Bartering-Prices at which the different parcels of each, have been sold.—

YARDS OF LACE

	s [d]	£
249 @ 3/		37..7..0
290 @ 2/8		38.12..4
125 @ 2/6		15.13..6
18 @ 2/5		2..2..6
27 @ 2/4		3..3
40 @ 2/3		4.10..
21 @ 2/2		3..5..6
1463 @ 2/		146..6..
14 @ 1/10		1..5..8
50 @ 1/9		4..7..6
683 @ 1/8		56.18..4
93 @ 1/7		7..7..3
1283 @ 1/6		96..4..6
26 @ 1/5		1.16..10
46 @ 1/4		3..1..4
130 @ 1/3		8..2..6
721 @ 1/2		42..1..2
22378 @ 1/		1118.18—
354 @ /10		14.15
365 @ /9		13.13..9
120 @ /8		4.—
<hr/> 28496 y ^{ds} of lace		<hr/> £1622.12..8

YARDS OF EDGING

	s d	£
8 @	1/10	0.14..8
8 @	1/9	.14—
28 @	1/8	2..6..8
6 @	1/6	9
46 @	1/4	3..1..4
30 @	1/3	1.17..6
34 @	1/2	1.19..8
182 @	/10	7.11..8
689 @	/9	25.16..9
589 @	/8	19.12..8
132 @	/7	3.17
2073 @	/6	51.16..6
210 @	/5	4..7..6
951 @	/4	15.17
8497 @	/3	106..4..3
<hr/>		
13483 Yards of Edging		£ 246.16..2
28496 y ^{ds} of lace		£1622.12..8
<hr/>		
41979 Y ^{ds} of the whole		£1869..8..10

For the Stock computed at the rates at which it is usually purchased—it is supposed there must be a deduction of about one Third from the price of the lace—
Call it £600—And the sum left is

£1269..8..10

Errors excepted

JOSEPH DANA.—

[Endorsed] Enc. in L^{re} Joseph Dana
to Geo. Cabot Jan. 24, 1791

(30)

SAMUEL BRECK to HAMILTON, *on duck and glass manufactures at Boston.*

Samuel Breck, whose letter reproduced below is apparently in response to a direct inquiry from Hamilton, was a Boston merchant, conspicuous at this time chiefly for his connection with the Boston Duck and Sail-Cloth Manufactory, but also interested in a company newly formed for the manufacture of glass. The former enterprise was launched in 1788 and was aided by a bounty on duck, referred to in the letter below, which was granted by the Massachusetts legislature in March, 1789, and amounted to eight shillings for each thirty-yard piece. The glass manufactory spoken of by Mr. Breck presumably refers to the Boston Glass House which in 1789 was granted a charter by the state legislature with the exclusive right within the state to manufacture glass for fifteen years.

With respect to the Boston Duck and Sail-Cloth Manufactory, it may be added that certain documents available to Hamilton have disappeared. The "Account" which is said by Mr. Breck to have been transmitted by the company's agent to Mr. Gorham—presumably Mr. Nathaniel Gorham whose letter to Hamilton is reproduced on pp. 65-66, below—was either not forwarded to Hamilton or was subsequently destroyed. Furthermore, a letter concerning this Boston Manufactory appears at one time to have been included in the Hamilton Papers from which these present documents have been drawn. Davis in his *Essays* (*op. cit.* vol. II, p. 261) quotes a letter of Breck to Hamilton under date of September 1, 1791, to the effect that in September of that year "two hundred women and girls and fifty men were employed" in the sail-cloth establishment, and that "the capital invested amount to \$4000. in buildings and \$2200. in tools, etc." The ensuing letter bears this date, but obviously does not contain the data noted by Davis.

This manufactory is mentioned by Hamilton in his Report, p. 309, below.

BOSTON Sep^r 3^d 1791

Dear Sir

In conformity with your wishes it wou'd afford me great pleasure to make you acquainted with the exact State of the Duck & Glass manufactories in this Town, but an Account of the former having already been communicated by our Agent, to M^r Gorham to be forwarded to you will render any observations on that branch unnecessary except that the demand for our Sail Cloth far exceeds the quantity made, which indeed might be augmented if the Country produced plenty of Flax, The high price however which is now given cannot fail of encouraging the Farmer to raise enough for that & every other object— If the representation above refered to has not reached

you I will procure a Copy & forward it— We wait only for Workmen which are engaged & probably on their passage, to commence making Sheet and other Glass The director, who appears competent to the business, has prepared every thing, The Ovens Furnaces & implements of every kind are in perfect order— Their Cost including the building Materials &c, about Eleven thousand Dollars—it is supposed the quantity capable of being manufactured at these Works will more than supply this Commonwealth—indeed as the materials are abundant in this Country it may be so extended as to furnish many other States with that necessary article— The bounty given by this State for raising Hemp¹ is ample & will I presume, render our dependence on Rushia much less, & probably in a few years annihilate that Commerce! If the bounty on Duck should be continued after January next it must produce the same effect, but as the *Act for that purpose* expires in December, we fear it will not be revived, however there is much consolation in the reflection that it is always within the power of the United States to *secure these great objects*— I know how precious your time is & therefore will not occupy more of it, except to request you will present Mrs & the Miss Brecks best regards to Mrs Hamilton & believe me to be with sentiments the most sincere

Dear Sir

Your Obedient Servant

SAM BRECK

[Endorsed] 3 Sep. 1791

S. Breck

Duck & Glass Man'y

(31)

GEORGE CABOT to HAMILTON, on cotton manufacture at Beverly, Mass.

The Beverly Cotton Manufactory hereinunder described is mentioned in Hamilton's Report, p. 313, below. Subsequent accounts may be found in Bagnall (*op. cit.*, pp. 89-100) and in White's *Memoir of Samuel Slater* (pp. 52 ff.).

This letter to Hamilton, it may be added, is published in Lodge's *Life and Letters of George Cabot* (pp. 43-46) but is reproduced here because of its intimate relation to the rest of the present correspondence.

¹ The bounty on hemp was introduced in 1786, and continued for a number of years.

BEVERLY, Sep. 6. 1791

Dear Sir,

Being absent from home when your letter of the 25 Ult^o arrived it has been out of my power to answer the enquiries it contains untill this day's post.—

Almost 4 years have expired since a number of Gentlemen in this place associated for the purpose of establishing a manufactory of cotton Goods of the kinds usually imported from Manchester for mens wear—the various parts of this complex manufacture are performed by machines, some of which are very intricate & others delicate—a want of skill in constructing the machinery & of dexterity in using it, added to our want of a general knowledge of the business we had undertaken, have proved the principal impediments to its success—destitute of the necessary information ourselves we were subject to be misled by every pretender to knowledge—a number of Europeans chiefly Irish have been successively employed by us, but as no one of them was master of any branch of the business, and most of them proved deficient in some quality essential to usefulness; one only has remained in our service—satisfied from experience that we must at last depend on the people of the country *alone* for a solid & permanent establishment we have for a long time directed our efforts to their instruction, so that of the 40 persons now employed in our workshop 39 are natives of the vicinity—our machines are—

- 1 Carding engine which with the labor of 1 man cards 15lb pr day, & with the labor of 2 men is capable of carding 30^{lb} pr day.—
- 9 spinning Jennies of 60 to 84 spindles each
- 1 doubling & Twisting machine constructed on the principle of the Jenny—
- 1 slubbing machine or coarse Jenny to prepare the ropings for the finest Jennies where they are fitted for doubling and twisting.—
- 1 Warping mill, sufficient to prepare this part of the work for a very extensive manufactory.—
- 16 Looms with flying shuttles—10 of which are sufficient to weave all the yarn our present spinners can furnish.—

2 Cutting frames with knives guide &c.

1 Burner & furnace with apparatus to singe the goods—
Apparatus for coloring, drying &c.

A summary of our accounts lately exhibited by the managers shews our actual expenditures to have been about 14,000 Dollars—against which may be placed

Buildings &c. worth as they cost	3,000—
Machinery & apparatus now worth	2,000
Goods & unwrought materials	4,000
Sunk in waste of materials, extraordinary costs of first machines, & in maintaining learners and compensating Teachers	} 5,000
	<hr/> 14,000

it should be noticed however that the Legislature of Massachusetts having granted aids in Land & lottery tickets¹ that may amount to about 4,000 Dollars, the neat loss to the Proprietors may be estimated at only 1,000 Dollars actual money & the interest on the advances for about 2 years—at present we manufacture at the rate of 8 to 10,000 yards per annum, worth in the market on an average $3\frac{1}{6}$ —these goods cost us $3\frac{1}{6}$ without adding any thing for the use of that part of the capital which is constituted by Buildings, machinery & apparatus; if the proper allowance for rent and repairs of these be added it would raise the cost of the goods 6^d higher, which is indeed the true cost & is equal to what they bring in the market.—the enclosed specimens numbered 1 & 2 shew the proficiency we had made 2 years ago, & by comparing with these the other specimens on the same paper which were executed lately, may be readily seen the improvement we have made since that period—

with respect to our future prospects they are less discouraging than they have been— we have subdued the greatest difficulties, & we shall not be exposed again to many extravagant

¹ The State granted the company state lands to the value of £500 in 1789, and two years later (March, 1791) granted it four hundred tickets in the state lottery then in progress, and three hundred in the next (Davis, *op. cit.*, vol. II, pp. 272, 274).

charges which heretofore have swallowed up our funds without any reproduction; many expences, such as, the rent of the Building, wages of the Dyer, compensation to managers & some others will remain nearly the same tho' the scale of business should be greatly enlarged, consequently the proportion chargeable on each yard of goods will be lessened as the whole work extends— besides we are not without expectation of placing many parts of the work in private families where we can avail ourselves of the cheapness of household labor—our machinery has been bad and dear, it is now perfectly well made & cheap— our Artists have been learning their trades at our expence— their work is now worth more than it costs, and as they improve in skill & adroitness we expect that they will perform more and better work for the same compensation:

on a comparison of the prices of labor in this country with those of Great Britain we perceived that altho' the wages of common labor is much higher here, yet that of the Artificer is not— here the demand for labor is chiefly agriculture and the wages seem to be regulated by it, there the machanic Arts afford so much employment that the demand for every species of skill and ingenuity is constant and high— hence it happens that we can satisfy our artists with wages very little above the common labor of the country, while those who come from Europe will not work without a much greater price— it is on considerations of this kind that our hopes principally rest, and with these ideas we shall proceed to extend our business as fast as we can train the labors to the proper execution of the work— This however must be very slowly as the heavy losses on ill wrought goods discourage extension beyond a very limited ratio —

We have as yet had no experience of the cotton of the southern States, but it appeared early to be essential to our interest to use cotton of the longest fibre & the best cleaned—that of Cayenne, Surinam & Demerary has been preferred tho' at a price 2 or 3^d per lb higher than Cotton of islands—in proportion as our workers are awkward & unskillful is the necessity of furnishing the best materials— bad materials wou'd be wasted altogether— at present we wish to have the cotton that grows



NATHANIEL GORHAM

nearest to the Equator, but when our spinners are more perfect an inferior kind may perhaps be wrought with advantage¹

With the highest respect & esteem I have the honor to be Sir

Your m^o ob^t & m^o h^{ble} Servant

GEORGE CABOT

Honorable Mr. Hamilton

[Endorsed] A. H. Fin. [Finance?] per G. Cabot Esq^r

6 Sep. 1791

Manufactures

Beverly

(32)

NATHANIEL GORHAM to HAMILTON, *on manufactures of Boston*.

Nathaniel Gorham was a prosperous Charlestown merchant, who was also prominent in politics, serving as member of the Massachusetts Legislature and of the national Congress.

BOSTON Oct^r 13th 1791

Sir

In contemplating yours relative to the manufactories of this State—I am apprehensive we shall not make so good a figure as in reality we ought to do—and the reason is that the goods & articles made in this State are of such a nature as not to appear in a very conspicuous light, altho they are not the less useful

About twenty years ago the importation of European goods into this State was nearly double to what it is at present—this will be accounted for by some People by asserting that the Connecticut trade has taken a turn from hence to N York—this is in a great degree true—but it must be observed that this place never possessed the whole of it; a considerable part always going to N York—

But it is further to be observed that a great part of New Hampshire & almost all Vermont has come into existence since the period above mentioned & a great part of those people come down to Boston to trade especially in the Winter, fully equal in my opinion to those who came from Connecticut—

¹ See Hamilton's direct use of data in this paragraph: Report, pp. 311-312, below.

besides which the People in this State have very much increased within twenty Years —

How then is it to be accounted for that the Importations are not now so large— I answer because the People in their own Families & for their own use manufacture double to what they did 20 Years ago— it is now worth the observation of the curious traveler through N England to observe (more especially out of the great Roads) the cloathing of the Country Family & he will find their common cloaths almost wholly made by themselves. let him at night view the Bed & bedding & he will find it the same from the Bed Tyck to the Pillow case— this has given a most powerful check to the importations. & with other concurring causes has rendered the People of this Country at the present moment the happiest on the face of the Earth— & so far as I can recollect history, does not furnish any instance of a people equally happy— in short I believe it is not in the case of Human nature to be exceeded— & the People seem sensible of it— all uneasiness and murmuring being at an end— & good humour & chearfullness universally prevailing— Those branches of business that are carried on to any effect & of importance are contained in the several inclosed papers¹— they will some or all of them probably succeed which will be a stimulous to further attempts— & I believe little or no doubt can be entertained but that we shall be manufacturing as fast as circumstances make it necessary or convenient —

I am with great esteem

& regard— Sir Your

most Humble Serv^t

NATH GORHAM

Hon Alexander Hamilton Esq^r

[Endorsed]

15 Oct^r 1791

Nath Gorham

¹ These "inclosed papers" have disappeared. None corresponding to them are to be found among the Hamilton Papers at Washington.

New Jersey

(33)

AARON DUNHAM to HAMILTON, *on letters of information.*

Aaron Dunham was supervisor of revenue for the state of New Jersey, with headquarters at Trenton. He was one of the Treasury officials to whom Hamilton directed his original request for information regarding domestic manufactures.

SUPERVISORS OFFICE

TRENTON 9th Sept^r 1791

Sir,

On the 19th of June I wrote a Circular letter to such Gentlemen in the Different parts of this State, as I conceived would be likely to give me the best information respecting Manufactures of every kind carried on Within their knowledge, the letter inclosed is the only one as yet received in Answer, as they come to hand shall forward

I am Sir

with all due respect

your very Hum^e Ser^t

AARON DUNHAM

Alexander Hamilton Esquire

(34)

SILAS CONDUCT to AARON DUNHAM, *on manufactures in Morristown, N. J.*

Silas Condict was a prominent citizen of Morristown and served in the national Congress from 1781 to 1784.

MORRIS TOWN 25 Aug^r 1791

Sir

I have to acknowledge the receipt of your favour of the 19 ult, on the important Subject of our Manufactories. I should be happy to have had it in my power to give you a more favourable account of the matter than I can do. however, in General I can say that Industry and an attention to Mechanism is gaining Ground, tho' We have no established Companies, or Manufactories carried on here, the principal branch of business

that we can call Such, is that of the Iron manufactory; and that is carried on by individuals. We have in this County, two Furnaces, at which are made various Castings of hollowware pig &c. two Slitting & Roaling mills; and a large number of Iron works: Some refining but most of them are Bloomeries, and there are a number of Naileries, that are carried on, these Several branches of the Iron business employs a great Many People, which is one of the principle advantages attending it. and if some mode of Inspection, could be adopted to prevent the vending of Iron, Nails &c, not well made or unfit for Market it would I think be of great utility & tend much to perfecting the business.

Our part of the Country is well adapted for keeping Sheep, and their numbers are fast increasing among us and I doubt not but that a Woollen Manufactory might be carried on here to advantage, had we a Sufficient number of Men of Spirit and Capital to engage in it.

The Silk making Seems to ware the most favourable aspect altho it is yet only in Embrio. one Gent^m has procured Seed & has now from 60 to 100,000 plants in nursery and has got a Sufficient Quantity of the Eggs to produce a Considerable Stock of Worms next Spring, and our People Seem engaged as soon as time Maturates the Trees to apply themselves to this branch of business, and if the Legislature of the U. S. would encourage it, by Premium, or Laying a heavy Duty on imported Silk, I flatter myself that this part of the State in a Short time would benefit Much by the Culture of Silk, my hopes of Success are raised more on this than any other branch, because the People in General Seem more engaged to try the Experiment, in this than any other— As I have not been engaged in the Iron business nor in the Mercantile line, it is not in my Power to give you an Estimate of the produce of the Iron, but probably you may have it from Some Gentlemen that are better Qualifyed to do it than your

Hum^e Sev^t

SILAS CONDUCT

[Addressed] Aaron Dunham Esq^r
Trenton, N. J.

[Endorsed] Silas Conduct, Esq.

Aug. 25th 1791

New York

(35)

NATHANIEL HAZARD to HAMILTON, *on manufactures of steel, porter and snuff with special reference to possible excise taxes.*

Nathaniel Hazard was an ironmonger and a merchant of New York City and an occasional correspondent of Hamilton on other matters.

Sir

Mr. White Matlack who is one of our first Ale Brewers in this City, goes to Philadelphia on Business (of what Nature I know not) which I understand, will lead him to wait upon you— One Part of his private Business he tells me, is to view the Operations of a Steel Furnace which he erected there, & has lain dormant for some Months This Article is of very great Consumption in America. It is made of various Kinds, as good as english, & afforded cheaper. There are some Kinds not yet introduced, particularly that of the german Mode & Temper, which may easily be done. Mr. Matlack is not averse to a moderate Excise on american, provided, a proportionately heavy one, is laid on foreign Steels. I have been for several Years, Agent for the Sale of that made at Matlack's Furnace. I apprehend the Consumption of Steel in America is little short of 3000 Tons per Annum. The Use of american Porter & Beer is rapidly increasing, *particularly in the Southern States*. The Vend of Snuff is not inconsiderable, & confined to the Northern, principally. Of these Articles I speak professionally, or occupationally; having dealt extensively in them for several Years. Of Course, I have been led to examine the principal Markets for them, from Boston to Savannah, with Attention. Mr. Maxwell has no Objection to Ten Cents p^r Pound Weight of Snuff, which I think however too high, for a Beginning. Mr. Lispenard has none to a moderate Excise on Porter; nor Mr. Matlack to one on Ale & american Steel. If capital Manufacturers do not object, I conceive others cannot complain. I have Minutes on these subjects in my Possession, that have lain by now many Months, which I wish to arrange & compress, & submit to your leisable Inspection. In August last were

published in Child's Paper,¹ "Hints &c on an american Excise", signed "Columbianus" containing Sentiments, *exactly similar to mine on that subject*; they were republished in Carey's Museum for September last² I can furnish from my own Experience Facts, which appear to me convincing Data, that a Revenue may be raised of above 80,000 Dollars per Annum, from the Articles I have mentioned & they be excised agreeably to the Makers Wishes. Mr Matlack is a Man of Candor, Enterprize & Information, & nearly related to Mr. Haines a considerable Brewer in Philadelphia. Perhaps it may not be useless to converse with him *on this Subject*, as he has other Business he tells me, which will lead him to wait upon you. I am Sir with as much Truth, Esteem & Respect, as Talents, Virtue & Perseverance combined, alone ought to excite, in the Hearts of honest, unambitious, independent Men, who only can judge of, & do Honor to real Merit,

your Friend & most obedient Servant

NATH¹ HAZARD

Newyork 9th March 1791—

[Addressed] The Honorable the Secretary of the Treasury
of
The United States of America

[Endorsed] Nathaniel Hazard
9 March 1791—

¹ This refers to the *New York Daily Advertiser* of which Francis Child was owner and publisher. This article appeared in the issue for August 3, 1790.

² "Carey's Museum" refers to the Philadelphia newspaper, the *American Museum*, of which Matthew Carey was the editor.

Rhode Island

(36)

MOSES BROWN to JOHN DEXTER, *on manufactures in Rhode Island.*

Moses Brown was the successful Providence merchant and cotton manufacturer, who gained particular distinction as one of our earliest philanthropists. Alone or with the aid of his brothers, he founded and endowed the New England Friends' School, now the Moses Brown School, and Rhode Island College, now Brown University.

John Dexter was supervisor of revenue for Rhode Island.

PROVIDENCE 22^d 7th M^o 1791

Esteemed Friend

I duly rec^d, thy L^{re} of the 7th Inst with a Copy of a L^r from the Secr^y of the Treasury of the 22^d Ul^o inclosed, and as the subject of promoting Manufactures in this country has been a desireable Object in my view for years past, I shall chearfully give every information in my power which may contribute to further the views of the National Legislature or Assist the Secr^y in forming a plan for promoting Manufactures in the United States.

The spermacity Manufacture was extensive here, before the late War, it commenced in this Town about 1754, when Most of the Headmatter¹ Caught in this Country was, with the Oil, carried to England but as Experience was gained in working and an increased quantity thereby got Out of a barrel, the price for saving it separte from the Oil was increased and the Whalemen encouraged to save the headmatter first before they did the Oil, and the Increase of the Fishery was greatly promoted by the bounty² given on the Headmatter above the price of the Body Oil so that from 80 to 130,000 C^t Weight of Spermacity candles were Annually Made here from the year 1760 to 1776 According to the success of the Fishery from

¹ The head of the sperm whale contained a peculiar fatty substance which was recovered and used in the manufacture of spermaceti candles.

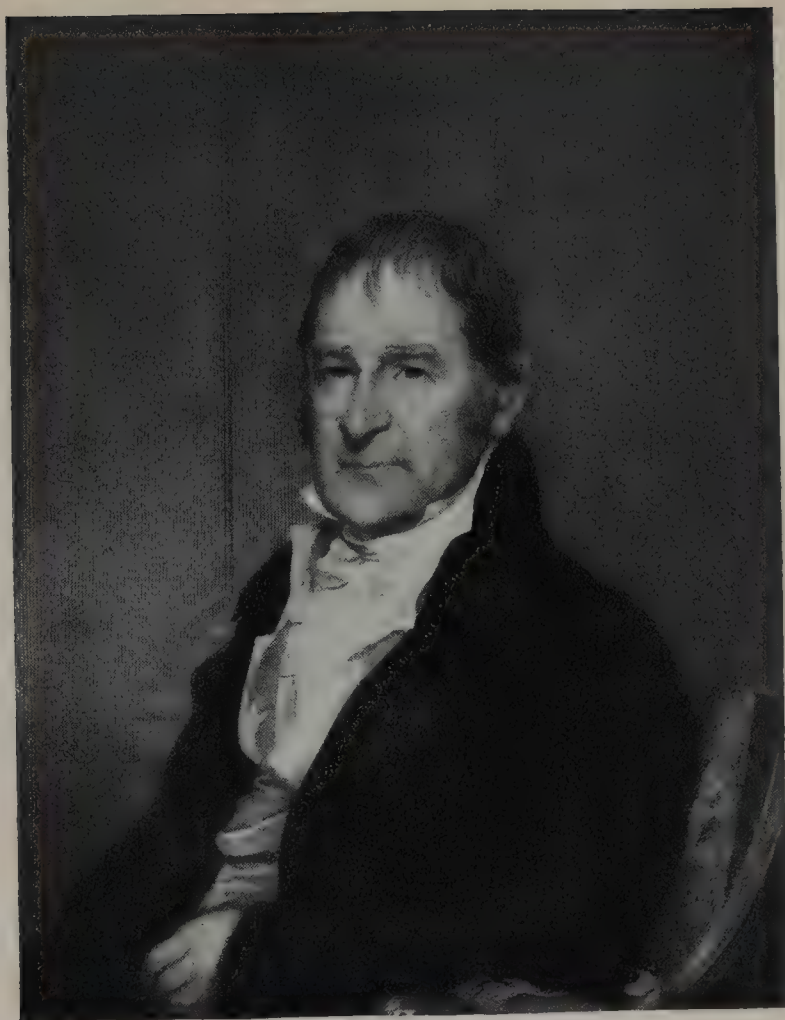
² No reference can be found to this bounty on headmatter in the Statutes of the State or in other material. The only Rhode Island bounty at all related, of which note can be found, is one on whale oil and bone, enacted in 1733 and repealed in 1745.

this Town and Nantuckett from whence We imported the greater part The Whale Fishery being broken up by the War; and but little gone into from hence Since, together with the great impoverishment of the people of the Island of Nantuckett by the War, who have not yet rose to One half of their Vessels they had before and the Manufacturers of Candles there Working most of the Head Caught there, that Valuable Branch seems to be Lost to the Town. and I am prety clear there is not half the Quantity of Spermaceti Candles Made in America Any One year Since the War as was made in this *Town, only*, for several years before it. The Spermaceti Whale are Drove from their Usual Feeding Ground so that the Oil caught is principaly from the Right Whale or born Whale, as is allso the case of the Fisheries from England and France from which Whale, no SpermaCety is taken but from the Body Oil of SpermaCeti Whale a small proportion is Extracted which is Made Up with the Headmatter & principaly carryed to the Westindia Markett as well from England as America.

The Distilleries of Spirits have been Antient in this Town One Large One for Spirits and Two for Gin Since the peace but as the Import Laws & Revenue thereby Collected will best shew their present state I shall not add respecting them We had One sugar house before the War, One Erected about or near the Close of it and another Since, the last of these, only, is at Present supplyd or wrought in, probably owing to the Difficulty of Obtaining Stock Sufficient to make the Business an Object to the Owners, Like Our SpermaCeti Manufacturies

In the Spring of the year 1789 some persons in this Town had procured Made a Carding Mashine a Jenney and a Spining Fraim to work by hand After the manner of Arkwrights Invention, Taken principaly from Models belonging to the State of Massachusetts which was Made at their Expençe by Two persons from Scotland who took their Ideas from Observation and not from Experience in the Business,¹ These Mashines made here not Answering the purpose & Expectations of the proprietors and I being desirous of perfecting them if possable,

¹ Portions of this letter relating to the cotton manufacture are reproduced in White's *Memoir of Slater*, pp. 65, 84-5, 367, note. Note is made of the Providence cotton factory in Hamilton's Report (see p. 313, below), and subsequent accounts are to be found in White, *op. cit.*, pp. 71-112, and Bagnall, *op. cit.*, pp. 146-165.



MOSES BROWN
(Based upon a painting by Stuart.)

and the Business of the Cotton Manufactory so as to be Usefull to the Country I purchased them, and by great Alterations, the Carding Machine & Jenny was made to Answer The Fraim with One Other on nearly the same Construction Made from the same Moddle and Tryed without success at East Greenwich, which I allso purchased, I Attempted to set to Work by Water and made a Little yarn so as to Answer for Warps, but being so Imperfect both as to the Quality and Quantity of the yarn that their progress was Suspended till I could procure a person who had Wrought or seen them wrought in Europe for as yet we had not, late in the fall I rec^d a Letter from a young Man then lately Arived at Newyork from Arkwrights works in England informing Me his scituation, that he could hear of no perpetual Spining Mills on the Continent but Mine & proposed to come and work them I wrote him & he came Accordingly, but on viewing the Mills he declined doing anything with them and proposed Making a New One Useing such parts of the Old as would Answer, We had by this time got several Ginnies and some Weavers at Work on Linnen Warps, but had not been able to get Cotton Warps to a Usefull Degree of perfection on the Jennies and Altho I had found the Undertaking much more Arduous than I expected both as to the Attention Necessary and the Expence, being Necessitated to Employ Workmen of the most Transient kind and on whom Little Dependence could be placed and Collect Materials to Compleat the Various Mashines from Distant parts of the Continent, however We, I say, We (because I had Committed the Immediate Management of the Business to my son in Law W^m Almy and Kinsman Smith Brown under the firm of Almy & Brown) contracted with the young man from England to Direct and Make a Mill in his own way which he did and it Answered a much better purpose than the former but still imperfect for want of Other Mashines such as Card of a Different Construction from those Already Made and remade-over, with various other Mashines preparitory to the Spining, all which with the Necessary Mechanicks Skilled in Working of Wood, Iron, Brass &c &c was more than Twelve month Compleating before we could get a single Warp of Cotton perfected, During this Time Linnen Warps were wove and the Jennie Spining was performed in Different Sellers of

Dwelling Houses but finding the Illconveniences of this We have now a Factory House & Dye House Erected and Occupie Other Buildings for the Singing, Callendering & other Mashines. —There being a Variety of Branches in the Perfecting of the Cotton Business, as, the Picking, Soaping Pressing, Stoveing or Drying the Cotton, ropeing it by hand or on Mashines, Spining, Bobbin winding, Weaving, Cutting for Velvets or other Cut goods, Singing or Dressing, Blacking Dying and Finishing, renders it more Difficult and requires longer Time to perfect than many Other Branches of Business in a Country where there are very few acquainted with it, but when Each Branch is Learned it may be Extended to Any length Necessary by Means of the great Advantage of the Mashines and the saving of Labour. There has been Made in this Factory of Almy & Browns Since the 1st of the 1st M^o last Velveteens Ververets, Corduroys, Thicksets a variety of Fancy cutt goods Jeans, Denims, Velures, Stockenets Pillows or Fustians &c &c as p Acc^t at Bottom 326 ps Cont^s 7823 yards There are allso Several other persons who Manufacture Cotton & Linnen goods by the Carding Mashines & Jennies but when they Make all Cotton Goods they have the Warps from Almy & Browns Mills, Samuel slater the young Man from England being allso Concerned therein, The Dying and Finishing is allso Chiefly done by their Workmen There are allso Cotton & Linnen Goods Manufactured at East Greenwich, their Cotton Warps are made at the Afforesaid Mills, The Quantities Manufactured by those several Persons and others in the Common way of family Work I expect will be given an Account of by themselves as Collected by the Mechanical & Manufacturing Society in this Town, I therefore refer to them. For the Degree of Maturity our Cotton Manufactory has obtained and their Different Qualities I refer to the Pattrons of the Mill yarn and Goods made from Warps of it herewith sent, the prices sold at are allso Marked

As to the Impediments under which this Business Labours I beg to observe. No Encouragement has been given by any Laws of the State nor by any Donation of any Society or Individuals but Wholely began Carried on and thus far perfected at private Expençe.

Our Commencing the Business at a period when from the

great Extent of it in England and Ireland, and Other causes, Many became bankrupts, their goods were sold at Vendue and ship'd to America in large Quantities the 2 or 3 last years Lower than Ever before, add to this, which is much the Greatest Brittish Agents have been Out in this and I presume, some Other Manufacturing Towns with Large Quantities of Cotton Goods for Sale and strongly Solisiting Corrispondence of people in the Mercantile Line to Receive their Goods at a very long C^r say 10 M^{os} which is 6 and 9 more than has been Usual here before, doubtless for the Discouragement of the Manufactory here, This bate has been too Eagerly taken by Our Merchants who from their Activity in Business mostly trade Equal to, or beyound their Capital and so are induced by the long C^r to receive the Goods in expectation of Turning them to Advantage before the Time of payment, but the great Quantities which some have on hand we have reason to expect will disappoint them, but Others being induced by the same Motive are supplyd and thus the Quantities of Brittish Goods of these kinds on hand Exceeding the Markett Obstruct the sale of Our Own Manufactorys without the Merchant trading in them getting his Usual Proffits by them, this English Trade therefore in time would be reduced for want of Proffits, but when the Actual Sales of British goods fail, of the cotton Manufactories, they are Sent and left here on Commissions— This I am informed by good Authority was the Polacy of the English Manufacturers, formed into Societies for the purpose, about 10 or 12 years ago, when the Cotton Business began in Ireland, Agents were sent Out into the Manufacturing Towns of that Nation to Disperse such goods as was made there at a Less price than they could at first be Made, in order to break up the Business, which it is said would have had the Effect if the Irish parliament and the society for promoting Manufactures had not Taken up the Subject and granted Large Bounties, Such as Effectually Enabled the Manufacturer Soon to Vie with those of England in Supplying their Own Markett, and they now Export great Quantities. I mention this Circumstance to Shew the attention of the people of Ireland to Establish this Valuable Manufacture, and When it is Considerd that, Cotton, the raw Material may be raised in the United States and not in Ireland, how much more Attention Ought Our Legislature to

pay to this Object? which brings me to the subject of Raising Cotton in Our Southern States which we find by Experience is as Imperfect and more so, than the Manufacturing when raised; This I presume is much Owing to the promiscuous Gathering and saving of this Article from the podd,* in which it Grows, some of which like fruit on a Tree are fair and full Grown while Others are not, in the picking of which and taking the cotton Out of the podd care should be taken that it be kept separte, and the thin membrane which lines the podd and sometimes comes off with the cotton in it's Seperation from them, should then be sever'd and the clean full Grown preserved to Work on the Mashines, the Other will Answer to work by hand, but as the Cotton must be Clean before it works well on the Mashine the present production in the Mixed Manner in which it is Brought to Markett does not Answer so good purpose, the unripe short and durty part being so inveloped with that which would be good if Seperated properly at first, so Spoils the Whole as to discourage the Use of it in the Mashines and Obliges the Manufacturer to have his supply from the Westindies under the Discouragement of the Impost,¹ rather than Work our own production: a Circumstance Truly Mortifying to those who from Motives of Promoting the Produce and Manufactures of Our Own Country as well as from Interest, have been at large Expençe & Trouble to Effect so Desireable an Object. I therefore beg leave to suggest the Idea of some Encouragement to the raising and Saving of Cotton Clean & good fit for the Manufacturers, as well as some Encouragement on the goods Manufactured, This perhaps may be Effected by Applying a Bounty on the raw Materials of the 1st Quality Suitable for the Business, and on the goods Manufactured Equally to be paid Out of Additional Impost on all Cotton & Cotton & Linnen Goods & Cotton yarn Imported into these States from abroad. May I not allso be permitted on this Ocation to suggest the propriety of Suspending the Impost on the first Quallity of Cotton till our Southern States could supply Such as would Answer to Work on Ma-

* The frequent Shifting of the seeds of this as of most Annual plants not Natural to the place of Raising, would most probably add to the perfection of the product. [Note by Mr. Brown.]

¹ The duty on raw cotton under the tariff of 1790 was three cents per pound.

shines.— I have Mentiond yarn, as the importation of that Article from India has been Suggested by the late Manufacturing Committee in Philadelphia at which time no good yarn had been Made fit for Warps, but as the Manufactory of the Mill yarn is done by Children from 8 to 14 years old it is as near a Total Saving of Labour to the Country as perhaps Any Other that can be named, and therefore no importation of the yarn Ought to be Admitted without a Large impost if at all, as the Secr^y May be assured that Mills and Mashines may be Erected in Different places in One year Sufficient to make all the Cotton yarn that may be Wanted in the United States both for Warps and for Knitting & Weaving Stockins, Was Encouragement given to protect the Manufacturer from being intercepted in the sale by foreign importation, but from this Circumstance and that of the Abillities of the Manufacturing interest of Great Brittain to intercept the sale of Our Own Goods, at a price as low as theirs has been heretofore sold by Our importing Merchants, the Actual Combination of them in the case of Ireland and most probably Our present Circumstance, forms a very great Discouragement to Men of Abilities to lay Out their property in Extending Manufacturies, the preparation for which even before they can be perfected must be lost if they cannot be Continued. I have been lengthy on this subject not only because my family have Engaged in it, but because I conceive from the Advantages of the Mills & Other Mashines and the Raising of the Raw Materials Among Ourselves, this Country may avail itself of one of the Most Valuable Manufactures from which every part of the Union may be Supplied— I apprehend this subject would have been laid before Congress by the United representation of the Cotton Manufacturers had not some states Liberaly Contributed to the promotion of it particularly the Massachusets, and the incorporate Company at Beverly largely partaken of their bounty in proportion to what they have done, Whether under an idea that the Assistance they had rec^d would have Enabled them to go on, which Others would be under a Necessity of discontinuing the Business as some have in fact tho't but to do for want of that Assistance in the same Goverment Viz the Factory at Worcester, or what Ever other Reasons the Beverly company may have, they have not come forward

as Expected. The Publick Spirit of the Massachusetts on this subject as well as Pennsylvania Are to be Applauded and in Justice to the Latter I mention this Circumstance, The Publication of their grant to a Certain person for a Certain Mashine in this Manufacture reaching England & Comeing to the Knoledge of the Workmen at Arkwrights Mills Ocationd the workman before mentiond, privately comeing to America and perfecting the first Water Spining in the United States that I have heard of, 'tho I am informed a Company from England are now about to Erect Mills near New York for which the Machinery is making at Newhaven¹ It is an Undoubted fact Authenticated to me by Divers persons from England that the King has frequently made proclamation against any Tradesmen Leaving the Kingdom & Called on his officers for their most Vigilant Watch against it as well as against any Draughts of Mashinery being carried Out, this also should excite Our Attention to those Advantages which they find of so much Consequence to that Country². The Manufactory of Iron into Blisterd steel Equal in Quality to English has been began within about 12 M^o in this Neighbourhood and is Carried On by Oriel Wilkinson who informs me he can make good Business at 10/ p C^t for the steel in Blisters, Returning Weight for Weight with the Iron Manufactured. the Drawing into Barrs to any shape being an additional Charge.—

Beside the foregoing I had in Contemplation some remarks on Various Other Manufactures carried on within this District such as the Making of Woolen & Linnen Cloths, Riging, Lines & Twine, Pigg & Bar Iron, Sliting it into Rods roling into plates & Hoops, makeing it into Shovels & Spades, hot & Cold Nails, Anchors, paper mill & Cloathers Screws, Wool and Cotton Cards with the Mashines for Cutting 800 Teeth in a Minute, Paper Mills, Fulling Mills Chocolate Mills & Snuff Mills by Water and Ginning of Cotton As well by Water as

¹ This story of the events which led to Samual Slater's coming to the United States is also to be found in White's *Memoir*, above-mentioned, p. 37, note. The bounty was one of £100 (Clark, *History of Manufactures in the United States, 1607-1860*, p. 43).

² In 1781 the laws of 1774 were extended to impose a penalty of £200 and twelve months imprisonment for attempt to export machinery used in textile manufactures (21 Geo. III, c. 37) and in 1782 an act (22 Geo. III, c. 60) imposed a penalty for enticing out of Great Britain men with knowledge of the new processes of manufacture.

Improved foot Wheels &c &c. but having been more lengthy on the subject of the Cotton Business than I Expected and the Time having nearly come when the Secr^y may want to apply the Information he gets I delay no longer the Closeing a Letter I had so long ago began, and Omit saying Any thing further upon them, Apprehending the Society here will Include them & others so far as may be Necessary¹. My Apology for the Delay of my Answer to thy L^{re} is only Absence from and Engagements when at home. If any Information worth the Reading Over this Long Letter can be derived I shall be glad and thou Art at Liberty to forward the same to the Secr^y if thou think proper without further Apology for its incorrect state.

I am respectfully his & thy friend

MOSES BROWN

Providence 15th 10th m^o 1791

[ENCLOSURE]

Account of the Cotton and Cotton & Linnen Goods Manufactured by Almy & Brown Since the Commencement of the Business say ab^t 15th of 6 M^o 1789 to the 1st of 1st M^o 1791.

45 p ^s Corduroys Contg	1090 yards	Sold from	3/6 to 4/4 p y ^d
25 p ^s Royal Ribs Denims	558 yds		3/ to 4/
13 Cottonett	324		2/6 to 3/
79 Janes	1897		2/ to 2/6
27 Fustians	687		1/8 to 2/
<hr/>		<hr/>	
189 p ^s	4556 yd ^s		

¹ The report of the Society to which allusion is here made is probably the statement of the Committee on Manufactures, which is the next document in this series.

From the 1st of 1st M^o 1791 to the Date being 10 Months

30 p ^s Ververets Cont ^s	669	4/ to 4/6
30 p ^s Thicksets	745	3/6 to 4/
45 p ^s Corduroys	1001	3/6 to 4/
26 Fancy Goods Cord &c	664	3/6 to 4/
55 Royal Ribbs Denim &c	1284	3/ to 4/
74 Janes	1769	2/ to 2/6
66 Fustians	1691	1/8 to 2/
<hr/>		
326 p ^s	Cont ^s	7823 yds

John Dexter Esq Supervisor Providence
 [Endorsed] 22^d July 1791
 Letter from Moses Brown
 Cotton & other Manufactories
 R J

(37)

REPORT OF COMMITTEE, *on manufactures of Providence, Rhode Island.*

The Committee appointed on the 19th July last, to obtain a Statement of the Manufactures in this Town &c. ask Leave to report —

That they have obtained from the several Manufacturers the Information contained in the following Statements.—

Hat Making

Quantity manufactured in the Year 1790

121 Beavers, at 8 Doll^s each
 1327 Castors, a 18 to 48 Doll^s p Dozen
 4564 Felts, of diff. Qualities, from 5 to 12 Doll^s p Dozen

The Increase of the Business the present Year computed at One Third of the whole Amount of what was manufactured the Year past.

This Business was established in this Town in the Year 1730, of late great Improvements have been made and we flatter ourselves, that in a short Time Hats made in this Town will

equal any imported in Elegance, as they always have in Durability exceeded them, owing to the Excellency of the Materials. The Quantity manufactured might be greatly encreased (except in Hats made of Beaver) was the Sale sufficiently extensive, and consequently the Prices might be diminished—altho it is allowed that Hats made in America are now sold as low in Proportion to their Quality, as those imported—the foreign Coarse Hats being very unprofitable to the Purchaser—And as the Country abounds with Materials, it is our Opinion that the Manufacture might in a short Time be extended to the full Consumption of the United States—and Hats become a great Article of Exportation if the Impediments were removed—some of which (as it appears to be the Wish of the Hon, the Secretary of the Treasury) we shall take the Liberty to mention.—The Scarcity of Beaver and some other Furrs, produced in the Back Country is a *great* Impediment, which arises not from the Nature of the Country, but from other Nations being principally possessed of the extensive Furr Trade of this vast Continent, which enhances the Prices of Furrs so greatly, that Beaver Hats, which before the Revolution was sold at 5 Dollars, and sometimes at a Guinea, cannot now be afforded at less than 8 Doll^s—while the Price of Wool Hats are diminished considerably.—If this Trade was commanded by the United States, it might prove a great Source of Wealth, exclusive of the manufacture of Furrs among ourselves.—The Duty on imported Hats is so small¹ that it does not operate as a Check on Importations, where long practised, especially where Trade is managed by the Agents of Foreigners, who, thro regard to the Interest of the Houses which employ them will do all in their Power to discourage the Manufactures of the Country where they acquire their Wealth.—The Manufacturers in the Eastern States still feel the good Effects of a heavy Impost which some Years past was laid on foreign Hats, but even in those States² Importations are again made, which

¹ The duty on “furr” hats was seven and a half per cent *ad valorem* under the tariff of 1790.

² The Rhode Island tariff of 1785 imposed a duty on “every beaver hat, 6s.; every castor hat, 3s.; every felt hat, 1s. 6d.”. The Massachusetts Act of 1786 prohibited all importation of “hats made of fur, hair and wool and any or either of them”. Connecticut, in addition to a five per cent *ad valorem* duty on all foreign merchandise, imposed “on each Beaver and Beaverette Hat, 6s.; on each Castor Hat, 3s.; on each Felt Hat, 1s.”.

if attended with Success must operate greatly to our Discouragement from which Government alone can defend us./

The necessary Trimmings, Bow Strings, &c. which are almost entirely imported, might, in our Opinion, with a small Governmental Encouragement, be manufactured among ourselves.

As to the mineral Substances necessary to coloring we pretend not to judge, as we are ignorant of the Expence attending their Preparation

Block-making

3496 Feet made in the Year 1790

No return since — Workmen more than get Employ — Materials plenty, and easily obtained.

Tanning & Currying

In this Town and Vicinity the present Year Stock in

Hides Tanned	3010
Calf Skins,	3226
Goat	451
Sheep	1710
Hides <i>curried</i> , for diff. uses	1325
Calf D ^o	4278
Goat,	451
618 p ^r of Boot Legs, from 1 to 2 1/2 Doll ^s p ^r	
Calf Skins, 18 Doll ^s pr Doz.	

The Embarrassment on the Business of Tanning and Currying at present and for some Time past hath been very considerable, owing to the large Quantities of Leather imported from the West Indies,— The Duty on which is small in Proportion to many other Articles¹—we hope the Subject will be duly considered by the Hon. A. Hamilton, and such Information given to Congress, as may be proper and beneficial to those who carry on so great and necessary a Branch of the mechanic Business

¹ The duty on leather under the tariff of 1790 was seven and a half per cent *ad valorem*.

Saddle & Harness-making

Made within one Year past

999 Saddles, from 6 to 14 Doll^s

164 Sets Harness, for 4, 2 & 1 Horse Carriages,

This Business might be carried on to a much greater Extent, if there were sufficient Sales for the Work, considerable Quantities of which are Yearly exported.

Fringe and Web-weaving

Made in 1790— 1100 y^d Girth Webb—1350 y^{ds} Fringe, 360 y^d Lace equal to any, and at a lower Rate than can be imported, so that the Maker (*Jonathan Hill*) wishes for nothing but to be known.

Woolen Cloth

Manufactured in this Town & Vicinity, in the Year 1790 in the Factories & private Families,—30,000 y^{ds} of all Qualities—a proportionable Quantity the present Year and was the raising of Sheep duly encouraged, a sufficient Quantity might be manufactured for the whole of the Inhabitants.

Boot & Shoe-making

Shoes made within one Year past, 15,356 Pair, from $\frac{2}{3}$ ^{ds} to 1 $\frac{1}{2}$ Doll^s

Boots 215 p^s from 3 $\frac{1}{3}$ to 8 Doll^s

The Embarrassment this Business labours under is the Importations from Europe, which tends to undervalue the Price of our Work, to the great Discouragement of our Workmen

Nails

Manufactured in this Town, in 1790

3,000,000,	Prices —	20 ^d p. Hund.	D ^{rs} Cents
		10 ^d p H	I
		8 ^d p H	88
		6 ^d p H	75
		4 ^d p H (cut)	33
		3 ^d p H	25
		2 ^d p H	21

As the Materials for carrying on this Business, abounds in the Country, ; — and as many Country Peoples, Boys, as well as Men work at it in the Winter Season, it appears, that Nails have and may still be manufactured cheaper than can be imported, especially since we have Slitting Mills sufficient to furnish the whole Country with Rods.

Edge Tools

4500 Scythes, Axes & Drawing Knives, made in the Year 1790— As to Materials the like Observations may be made as in the foregoing Business.

Clock-making

From January to August 1791—has been made 6 Eight Day Clocks, from $33\frac{1}{3}$ Doll^s to 40 Doll^s— Might with the same Hands be made 3 Times that Number.— There is as many if not more imported from Europe, than made in the Country

Chocolate Manufacture

Made in the Year 1790, 60,000^{lbs} at 9^d p lb.

Much the same Proportion continues to be made, but the Duty on Cocoa so much exceeds the Duty on imported Chocolate, that if continued will discourage any Increase of that manufacture.¹

Soap and Candle-making

In 1790 — Candles made, 40,000^{lb} @ 6^d p lb

Hard Soap — 10,000 @ 5^d p lb

And continues in the same Proportion,—but labours under Embarrassment by Reason of large Quantities imported into the Southern States, with very little Profit to the federal Chest.

Coach and Chaisemaking

Made in 1790 — 56 Carriages of diff. Sorts

Silver and plated Work

Made in 1790 — 100 p^r Silver Buckles

1400 p^r Plated D^o

80 Doz. Silver Spoons diff. Sizes

¹ The duty on cocoa was one cent per pound, while that on chocolate was five per cent *ad valorem* under the tariff of 1790.

This Business might be greatly extended, especially in plated Work, there being more Hands than are fully employed—and large Sums, are sent to Europe, particularly for Coach & Chaise plated Harness Trimmings, which might be as well made here, and more durable, at nearly the same Prices.

Card-making

Made 1790 — 2550 Pair, and by a Return for 6 Months past, it appears there has been made 100 Dozen Cotton, @ 8 Doll^s p Doz and 120 Doz Wool, @ 5 Doll p Doz.

As this is a most necessary Business, so it is most profitable to the Public, as it employs Numbers of poor Children, who, while they are earning Somthing towards their Subsistence, are prevented from contracting bad Habits, and are introduced thereby to a Habit of Industry,— by which we may hope to see them become useful Members of Society. It were to be wished that the Wire could be drawn in this Country.

Brass-founders Work

Of all kinds made in this Town Yearly to a large Amount,— but by Reason of the great Variety of Articles, the Prices cannot be ascertained—but the Makers say as cheap, if not cheaper—and as good, if not better, than any imported from Europe.

Engines for extinguishing Fire!

There has been one made this Season, equal to any that have been imported—and the Maker Daniel Jackson is ready to receive Orders for any Size, from $266\frac{2}{3}^{\text{ds}}$ to $333\frac{1}{3}$ Doll^s Price

Joiner's & Moulding Tools

Made annually to the Amount of 1000 Doll^s—the particular Prices, by Reason of the great Variety cannot be ascertained—but are at present sold something higher than those imported—the Workmen not having full Employ—but as the Materials are so easily obtained the Prices might be reduced upon Par with imported Tools if there was Vent for large Quantities.

[Inserted here a torn scrap reading]¹

Manufactured by Almy & Brown from the commencement of their buisness to the 1st of Day 1st M^o 1791

Corduroys Royal Ribs

Denims Cottonets Janes

and Fustians——— 189 peices 4556 yards
from the 1st of 1st M^o 1791 to the present Date

Colverets thicksetts Corduroys

[F]ancy Cords Ribs Janes & C^a 326 p' 7819 y^{d2}

Paper Manufacture

From the 1st of January to 1st October, 1791—has been made in this Town—

1584 Rh. Writing Paper, the average Price 2 $\frac{1}{8}$ Doll p R

340 Rh. Printing, @ 12/3 d^s

840 Wrapping,— @ 5/6th D

153 Groce fine Paste Boards, 12 Doll^s p Groce

3000 lb Sugar Loaf Paper, @ 8 $\frac{1}{3}$ Doll^s p Hund

2000 lb Candle D^o — @ 8 $\frac{1}{2}$ D. p H

7300 lb Sheathing D. @ 3 $\frac{1}{4}$ D. p H

4800 lb Paste Boards

D^o for Bookbinding @ 4 D; p H

Paper, at present the most extensive Branch of Manufacture that is carried on in America, labours under great Disadvantages by Reason of the great Importations of the various Kinds of Coarse Paper, such as Paste Boards, Sugar Loaf & Sheathing Paper.

Leather Dressing & Glove-Making

From the 1st of January to 1st October 1791—

Skins, wash Leather dressed, 125 Doz. @ 3 Doll^s p Doz.

Ditto, tanned for Card Leather, 125 Doz. @ 3 $\frac{1}{3}$ Doll^s p D

Women's long Gloves made,— 200 Doz. @ 3 $\frac{1}{3}$ p Doz.

D^o Habit, 583 Doz. @ 3 Doll^s

¹ This scrap of paper bears on its back an endorsement: "Various Manufactures in Rhode Island."

² See return presented in letter of Moses Brown, p. 78-79, above.

Slit & rolled Iron Work

There is in the Vicinity of this Town, a *Slitting-Mill*, which in the Year 1790, slit about 50 Tons Nail Rods—at the same Place was made 50 Doz Iron Shovels, which now sell, the best made at 8 Doll^s p Doz. but if the Business was extended so as to employ 3 Master Workmen there might be enough made to supply all the New England States, and the best Kind sold at 7 Doll^s p Doz. There is also some Iron Hoops rolled at the same Mill.

Cotton Goods

Of diff. Sorts manufactured from 1st Jany to 1st October 1791—

In Mess Almy & Browns Factory — No Return¹

Mr W ^m Potters	2164 Y ^{ds}
Mr Lewis Pecks	2500 D.
Mr Andrew Dexters	466 D
Mr Ja ^s M'Kerns	700 D ^o

The Prices by the Piece are

Double twilled Cord	$\frac{2}{3}$ ds Doll p Y ^d
D ^o Fancy Cord	$\frac{2}{3}$ ds Doll
Jeans, on an Average,	$\frac{1}{3}$ d Doll
Fustian, ———	15 $\frac{1}{2}$ Cents

As this Manufacture is growing in Consequence, and engages the Attention of Gentlemen not immediately concerned in the Mechanic Arts—we doubt not it will find able Advocates—therefore think it unnecessary to enlarge in this Place.

There is large Quantities of Cabinet and Chair work *Cordage*, Coppersmiths, Braziers and Pewterers Work made in this Town, of which we have been able to obtain no regular Statement—but the Manufacturers of Pewter complain that they labour under a great Discouragement by being obliged to work large Quantities of old Pewter, which being of a base Quality,

¹ This section of the Report apparently was written before Almy and Brown contributed data on their production. When their "Return" was received, it was inserted out of its proper place. See above, p. 86.

imported from Bristol and Liverpool, and sold here for London make, they cannot, by Reason of the Scarcity of *Block-Tin*, make it equal to the London Standard, and at the same Time work up all the old Pewter in the Country.

Your Committee have only to remark, upon the foregoing Statements, that if there is any Thing expressed, which should be thought forward in pointing out the Impediments attending the Prosecution of any Branch of Manufactures they are persuaded it arises from an honest Zeal for promoting the best Interest of the United States—and in full Confidence in the parental Regard of the Supreme Legislature of the Union.—And it is the Boast of Americans, that instead of living under a Government which spurns at the Subject, for the Representation of any Thing that operates as a Grievance, those who fill the first Offices in Government are encouraging them to make such Representations, as may serve to give necessary Information;—and we doubt not that altho there are very few in Congress whose *immediate Interest* is concerned, yet a sincere regard for the *general Interest* will animate that truly honorable Body to give all the Encouragement which they can (consistent with a proper Regard to the Revenue) to that Class of Citizens who in Proportion to their Property pay so large a Share of the public Expence

Signed by Order and on Behalf of

The Commtee

WILLIAM RICHMOND, Chairman

Provd.d. Oct. 10 1791

A true Copy from the Journals

B: Wheeler, Secy to the Ass.

[Endorsed]

Copy Report of Commtee
on Manufacture

South Carolina

• (38)

DANIEL STEVENS to HAMILTON, *transmitting documents*.

Daniel Stevens was supervisor of revenue for the state of South Carolina, with headquarters at Charleston. He was one of the men to whom Hamilton directed his original request for information regarding local manufactures.

CHARLESTOWN 3rd September 1791

Sir/

Agreeable to your request have wrote a circular Letter to the most leading Characters throughout the State, relative to the Manufactures that may be carried on in the several Counties,—as yet, have only two Letters on the subject, one contains some small Samples of the Cotton and Linen manufacture carried on in families for their own wear—as any others come to hand, I will transmit them to you, and shall shortly give you some account of what Manufactures are carried on in Charleston—I am with regard

Sir/ Your Most Ob^t Sev^tDAN^l STEVENS

(39)

SILVANUS WALKER to DANIEL STEVENS, *on manufactures in western South Carolina*.[No ADDRESS] Sept^r 1st 1791

Sir

Agreeable to your request I am to inform you that there is no manufactories carried on in the interior parts of this State only in private families; and they in general manufactor as much as they commonly wear a few samples of which I have enclosed you¹ but am convinced from the small knowledge I acquir'd of that business and situation of that part of the country if the people could meet with proper encouragement even from having a tolerable market that manufactor might be carried on to great advantage and perfection as there is the

¹ These "samples" have been separated from Walker's letter at some time between 1791 and the present.

most convenient Mill seats I have ever seen in that part of America which [I] have been acquainted with and flax cotton & Hemp grow exceedingly well and very good sheep is raised here and might be much improved also silk is very easy raised in this country I am Sir with due

Reverance your Obligated Serv^t

SILV^s WALKER

[Addressed] Daniel Stevens Esq^r
relative to Manufactures
from Silvanus Walker

[Endorsed] 1 Sep^r 1791
Silvanus Walker

(40)

MEMORANDUM to DANIEL STEVENS *from leather manufacturers of Charleston, S. C.*

Sir/

In compliance to your Request, we have had a general meeting of the manufacturers of Leather within this City; and have made as near a calculation of Quantities, Qualities, & Prices as in our power to obtain. We also beg leave to assign some reasons why the selling prices of such Manufactures are higher here than in the Northern States: and describe some of the impediments laboured under, at the same time omitting many contingent ones that would be improper to detail as they originate from the principals herein submitted.

First, House Rent, we believe to be double, or at least one third more than at the Northward.

Secondly, The insufficient number of workmen, and their wages one third higher.

Thirdly, Provisions of all kinds considerably above the Northern rates. And particularly every imported Article made use of in our Trades, as Also other necessities required that cannot, but by import, be obtained, which lead us to the following observations as materially impeding our efforts in carrying on Business extensively.— The vast importations of almost every article ready made up in the Leather Branches, the long

and general Credit given by the Importers, in a manner oblige us to give the same, or suffer a rivalry in trade; in addition to which, the want of punctuality in payments, so necessary to enable Tradesmen to carry on business in a proper and extensive manner: These, with others, being impediments which strike at the root of Manufactories, make it *necessity* rather than choice to carry them on. With the utmost Deference we beg leave to observe, that proper attention had to the Duties on Imports respecting Articles fit for wear, and those that require Craftsmen to work up, would place the Mechanic in a much more eligible situation than he has heretofore been in, and secure the Basis of such trade on a permanent establishment.

We, with submission, observe the principal impediments that make this State one of the weakest in Manufactories of any in the Union, although in perfection of most things equal to any in the Leather Branches.

With respect to Societies or Companies, none exist in this City; our Trades being conducted individually.—

We are with much Respect

Sir Your obedient

and very humble Servants

signed in behalf of the whole

Charleston

October 1791

[Addressed]

BAZILE LANNEAU Chairman

WILLIAM ROUSE Secretary

Daniel Stevens Esquire

Supervisor of Excise

for the District of Charleston

[ENCLOSURE]

Periodical State of the Manufacture of Leather
by Report of the several Committees

from 1st Sept^r 1790 to 1st Sept^r 1791—

<i>Of Tanning</i>		<i>Selling Prices</i>	
Hides	7800	Soal Leather, wholesale	p lb 9 ^d a 10 ^d
Calf Skins	3400	d ^o retail	p lb 12 ^d
Hog, Sheep &		Saddle Skirt	p lb 15 a 16
other Skins	2000	Harness d ^o	p lb 14
		Bridle d ^o	p lb 18 a 20

Comm^{ee} — B. Lanneau, George Dener

*Of Cordwainers**Selling Prices*

Boots 1st kind 1938	} 2584 pairs	37/4 a 40/	p pair
2nd kind 646		23/4 a 28/	p pair
Shoes 1st kind 17566	} 42988 pairs	9/4 a 10/6	p pair
2 ^d d ^o 11422		5/ a 7/	p pair
3 ^d d ^o 14000		3/6 a 3/9	p pair

Committee—John Gourlay, William Rouse

*Of Saddlers, Harness Makers &c^a**Selling Prices*

Saddles 1st kind 1800	} 3000 Saddles	60/ a 70/
2nd kind 1200		28/ a 40/
Harness Coach 24	} 129 Setts	£ 11 a £ 13
Chaise 105		£3:10 a £ 5

Committee—Tho^s Holmes, Jn^o Rod^y Switzer

Note, The smaller & other Work in the Saddle and Harness making Business is computed equal to One third of the above Statement.

Done at Charleston South Carolina, by order of the General Meeting.

October 3rd 1791

Virginia

(41)

EDWARD CARRINGTON to HAMILTON, *on manufactures in Virginia.*

Edward Carrington was a brother-in-law of John Marshall, later chief justice of the United States Supreme Court, and was a confidential friend of Washington. He served as colonel in the Revolutionary War, then as a member of the Continental Congress and later still as mayor of Richmond. It was in the capacity of supervisor of revenue for Virginia that Carrington addressed this letter to Hamilton.

RICHMOND October 4th 1791

The enclosed papers contain parts of the information which I expect to furnish upon the subject of Manufactures in Virginia, and are transmitted agreeably to your request.¹ these papers have come from the two lower Surveys of the District; the information they contain as to the particular Neighbourhoods from which they are drawn, may be applied, with propriety to the whole of those Surveys: indeed, so equally do the people of Virginia go into Manufactures within themselves, that the application might be made to the whole Country, with only a few allowances, from a consideration of their respective staples, which I will in some degree enable you to make, upon the following principles. In regard to staples, Virginia is contemplated under three divisions, the Lower, the Middle, & the Upper: the first is comprehended between the Sea and the falls of our great rivers; the Second, between these falls and the blue ridge of Mountains—the latter takes all the Country beyond the Mountains.

The staples of the first are Indian corn principally, small crops of indifferent Tobacco, small crops of wheat, &, in some parts, lumber.

The Middle Country produces our great exports of Tobacco & wheat.

The Upper, Country produces Hemp, Flax & wheat principally, and small and indifferent crops of Tobacco.

¹ The "papers" referred to are the four letters and the "Return of Manufactures" reproduced immediately below.

I have observed that the people of the whole Country, are in habits of Domestic Manufactures pretty equally, except that some allowances must be made on Account of field labour upon their respective staples, these are as follow; the staples of the lower country require moderate labour, and that at particular seasons of the year. the consequence is, that they have much leisure and can apply their hands to Manufacturing so far as to supply, not only the cloathing of the Whites, but of the Blacks also.

The great staple, Tobacco, in the Middle Country requires much labor when growing, and, what with fitting it for market, and preparing land for succeeding Crops, leaves but little time for the same hands to Manufacture: the consequence is, that the latter business is carried on only by the white females in poor families, and, in wealthy families, under the Eye of the Mistress, by female slaves drawn out of the Estates for that purpose, aided by the superfluous time of a superabundance of house-servants; the consequence is, that less is manufactured here than in the lower Country, Yet the difference is, I believe, no greater than as to the cloathing of the field slaves, for which purpose Kendal Cotton, oznabrigs, & hempen rolls ar[e] purchased, but the owner of every plantation tans the hides of the Cattle which are killed or casually die, and, by that means, supplies the slaves in shoes for winter.

The staples of the upper Country require somewhat more field labour than those of the lower, and much less than those of the Middle, & having however but few slaves, and being distant from foreign intercourse, the people depend principally upon home Manufactures, and, at least, equal the lower Country in them.

As to raw materials, no Country under the sun, is capable of producing more than Virginia.—the lower Country, produces fine Cotton & Wool, and, both might be encreased even to satisfy great foreign demands—in many parts good flax is also made.—The Middle Country produces fine Cotton, but the more valuable staples of Wheat and Tobacco, confine the production to the demands of the private Manufactures of the Country itself—it is also well adapted to Hemp & Flax: of the first, some is produced for market; of the latter, every

family makes for its own use: to the same extent Wool is also produced.

The Upper Country supplies our Markets with great quantities of hemp, said to be equal to any in the World, flax is also here produced in high perfection, and in great quantities, the people using it for purposes to which, Cotton is applied below: for supplying the Article of Wool this part of Virginia is so favorable that large droves of sheep go from it, to the lower Town Markets.

The mountainous parts of Virginia, abound in Iron Ore, from which most of the Iron, and some of the steel, used in the state, are supplied, and the productions of both might be so increased as to make great exports. We have also a valuable lead mine, in the Southwestern part of the Upper Country, from which new Manufactures are daily coming into practice, such as sheet lead for roofing, shot &c.—there is a shot factory in Richmond, well established by the present worker of this Mine, and the same hand has furnished the lead for covering the roof of our *Capitol*, or State House. this mine was, during the War, worked under the public direction of this state, and supplied all the lead used in the Southern service: supplies of it, also went to the Main Army, but whether for the whole service, I will not undertake to say.¹

As to regular Trades we have but few, they are, however, encreasing daily—in the upper Country, there are several fulling Mills, from which good Cloth is seen. I will endeavour to obtain samples.

I have now endeavoured to give you, in addition to the enclosed papers, such information as will furnish a general idea of the Manufactures throughout this Commonwealth, and having been tolerably attentive to these circumstances, for several Years, as I have passed through the various parts of the Country, am persuaded you may rely upon it, as well founded. I have been led to do it, from a consideration, that the approach of the session, requires an early communication, and from the information expected from the upper Inspectors, having not yet arrived: When I receive their reports, they shall be forwarded immediately.

¹ See mention of this lead mine and manufacture in Hamilton's Report, p. 304, below.

I beg you to be assured, that this business has been attended with no material trouble or inconvenience, and that it has given pleasure to both myself & the Inspectors that you requested our assistance in obtaining the desired information.

I have the Honor to be
with great respect
Sir

Your Most Ob^t s^t

Alex^r Hamilton Esq.

ED CARRINGTON

Supervisor D: Virg

N. B. D. Ragsdales return is made upon 20 Families in one Neighbourhood, comprehending all classes in life from the richest to the poorest. upon my Census returns of the district of Virg^a (exclusive of Kentucky) 70,825 Families appear. this note is made upon a supposition that it may possibly be useful in calculations which the Secretary may wish to make.

[Addressed] Alexander Hamilton Esq

[Endorsed] 4 Oct^r 1791

Col^o Carrington

(42)

THOMAS NEWTON *to* EDWARD CARRINGTON, *on manufactures in Norfolk, Va.*

Thomas Newton was a lawyer of Norfolk, who later—1801 on—served for over thirty years as Congressman from the Norfolk district. In 1791, as this letter indicates, he was serving as inspector of revenue for certain eastern counties of Virginia.

NORFOLK 28 *Sept.* 1791

Dear Sir,

Having been much hurried by my private affairs since I left you at So: Hampton Court, prevented my information of the State of Manufacturies in this part of my Survey—the inhabitants of Princess Anne County make most of their Negroes Cloathing & their coarse Cloaths, with Shoes & Stockings—The Counties of Norfolk & Nansemond the Same,

in the Town of Norfolk there is a very extensive Tannery, which supplies most of the lower Counties with Leather, together with the little that is made by the Country people at their Own Houses & but few have a Vat or Trough to tann the hides of the Cattle they kill themselves. there is also a Ropery carried on here to a Considerable extent, but the owner thinks the Duty laid on imported Cordage is not sufficient to encourage him as most of the Ships are British & give a preferance to English Cordage at 10 pC^t higher than American made, *altho* the last is best being prejudiced in favor of their Own Manufactory—We have plenty of Shoe-makers, Taylors, Blacksmiths, House & Ship Carpenters, Cabinet makers, Carriage makers & Wheel wrights, that with what they do & what comes in from the Northern States, we cou'd do very well without any thing from Europe that they can make—in Portsmouth there is a small Tannery, but is not carried on with Spirit, Shoemakers &c Sufficient to make for their Consumption. I endeavored to Comply with your request in making a return According to the form sent me, but found the people Averse to giving in, I Judged it improper to say any more & have given you to the best of my knowledge a true State of our Situation as to Manufacturies here.

am with respect

Y^r Ob^t Serv^t

THO^s NEWTON JR

Col^o Carrington

[Addressed] Edward Carrington Esq^r
 Supervisor
 Richmond

Office of
 inspection Norfolk
 Tho^s Newton Jr Insp^r

[Endorsed] From Thos Newton Jr

Sept. 26 1791
 on Manufactures
 in Norfolk Princess Anne
 & Nansemond

(43)

ROBERT TWIFORD to THOMAS NEWTON, on manufactures in eastern Virginia.

PUNGOTEAGUE August 14th 1791

Dear Sir/

I Rec^d yours dated the 25th July the 10th Instant together with sum Advertisements; I have fixed two Auxiliary offices in Northampton & Two in Accomack Above my house & one at My house, so that I believe that the Destillaries are all within ten miles of an office except a few at Marcuty Bay; I have informed my self respecting the Manufacturies as well as the length of time would allow, 45000 yd^s all yarn 30000 d^o Cotton 45000 do wollen what we call* Lintsewoose Flax linnen coars & fine 315000 do. I suppose that $\frac{3}{4}$ of the people are clothed in their own Manufactory; Leather shoes we make cheafely within our selves & common Stocking; I shall in-deavour to Inform my self beter by the next Oppertunity and will write you more fully; When I am with

Respect D^r Sir Your Hub^{le}

Serv^t

ROBERT TWIFORD (Collector)

M^r Twiford includes in the above estimate the two Counties of Accomac & Northampton on the Eastern Shore in Virginia which contain, upon the Census returns, 9729 families. E.C.¹

[Addressed] Col^o Tho: Newton Esq^r

Inspector 4th Survey

Norfolk

p^r Captⁿ

Ge^o Scarburgh

[Endorsed] Rob^t Twiford upon
Manufactures on the
Eastern Shore of
Virginia

Aug. 14 1791

*Say linsey-Woolsey [Note inserted by Edward Carrington].

¹ Postscript added by Edward Carrington.

(44)

ANSELM BAILEY to THOMAS NEWTON, *on manufactures in
Surrey County, Va.* •

SURREY Aug^t 23^d 1791

D^r Friend

Thine of the 26th of last M^o I received & set about with much chearfulness to comply with thy request but thou'lt be perhaps surprised at hearing that most of the people in these parts have got into such a spirit of Jealousy that they suspect some design unfavorable to them in every thing that is attempted of a public nature. "What are they going to Tax our Cloath too"—was the reply of several, and as nothing I could say in respect to the real intention wou'd satisfy, was inclined to think it would be best to decline the attempt. I suppose however that several of the Neighbours make from three to four hundred yards of Clo. each year, which is mostly Cotton, a small proportion of it is mixt Cotton & Wool and Cotton & Flax but there is very little made that is all Wool or Flax.—I am inclined to think that for ten Miles round me the average quantity of Clo. would be nearly two hundred yeards to each Family—That at least $\frac{5}{6}$ of all the cloth shoes & stockings that are used in those Families are home made. The average price of which are nearly as follows—Cloth 2/—shoes 5/6 or 6/—& stock^{gs} the same

[The bearer, Cap^t Ellis, will deliver 10 yards of cloth made by Mary Pond for thee, & also £876 Cash to pay for the Ballance of—you sent to us . . .]¹

Thy Friend

ANSELM BAILEY

[Addressed] Col^l Thomas Newton

Favord by Cap^t Norfolk

Ellis

with a bundle

¹ This portion and the remainder are elaborately cross-hatched in the manuscript, and appear to form an affectionate personal postscript.

(45)

DRURY RAGSDALE to EDWARD CARRINGTON, *on manufactures in King William County, Va.*

Extract of a letter from Drury Ragsdale, Inspector for Survey No. 3, to Ed. Carrington dated King William County.

Sept 29 1791

"Inclosed you will receive a return of Cloth &c manufactured in my Neighbourhood.

It may not be amiss to inform you that it is my opinion that the manufactures in my Survey carried on in private families consist principally if not all together of Cotton and Wool, most of the fine cloth is of Cotton alone, made into such Cloth as Table linnen sheeting Jeans for Breeches and Waistcoats, in imitation of the Manchester manufactures, Bed ticking much superior to the cheap and common imported from Europe, Muslings in imitation of those from Scotland, striped cottons for Womens gowns; some patterns handsomer and more durable than the printed imported Cottons —

There being a scarcity of Wool it is generally mixed with Cotton, the warp being filled in with Wool makes the cloathing of the Young and Domestic Negroes, and, though not yeilding equal warmth with the cheap Kendal Cotton, is generally, when wove double more durable than those Cottons, as they are called. fine Stockings are knit to every degree of perfection, principally of Cotton, course Stockings are knit generally of Cotton & Wool & the Negroes prefer them to those imported.

As to the Article of leather there seems to be a scarcity owing to a distemper that has been very fatal for some years among the horned cattle. but what there is in the Country distant from Towns, are generally manufactured by the families themselves tho' it may be supposed from the manner of carrying on this business in the Country, that it cannot be in any great state of improvement.

The manufacturing of Iron seems to exceed all the manufactures carried on among us; most of the Blacksmiths in the Country are capable of making every Article necessary for Domestic use of the planter, as hoes, axes, Plows, shovels, spades, tongs, wrought handirons, nails, (this Article can be

[ENCLOSURE]

Heads of Families	White Male Tithes	White Female Tithes	White Children	Male Slave Tithes	F. M. Slave Tithes	Children	Total No in Family	Yards of Cloath			Value of fine Cloath pr yd	Value of Course	Stock-ings		Value		Total Amount of Value of Cloath &c	General Remarks
								Fine such as Family Cloathing Bedding Table Linning &c	Course such as Ne- groes Cloathing Blanketing &c	Total No of Yds			Fine prs	Course	Fine			
Thomas Avera	1	3		3	3	3	13	196	67	263	3/6	2/6	9	6	5/	2/6	£45. 13. 6	This return
James Ruffin	1	1	5	7	13	16	43	296	172	468	3/6	2/6	17	20	5/	2/6	80. 1. 0	Contains the
Sterling Ruffin	1	1	2	7	10	14	35	187	100	287	3/6	2/6	8	17	5/	2/6	49. 7. 0	Quantity of
David Pannell	1	4	3	9	7	10	31	284	116	400	3/6	2/6	16	13	5/	2/6	69. 16. 6	Cloath &c Manu-
John King	1	1	1	1	1	3	8	98	29	127	3/6	2/6	5	2	5/	2/6	22. 5. 6	factured in the
Hickerson Bagwell	2	1			1		4	56	13	69	3/6	2/6	6	1	5/	2/6	13. 1. 0	Families it con-
Nathaniel Fox Junr	1	1	4	5	3	6	20	120	80	200	3/6	2/6	7	8	5/	2/6	33. 15	tains from the
Wm Towler	1	1	2			1	5	46	22	68	3/6	2/6	6		5/	2/6	12. 6	1st day of Jan'y.
Bernard Lipscomb	1	1	3	4	2	7	18	70	60	130	3/6	2/6	9		5/	2/6	21. 5	1790 to the 1st
Mathew Towler	1	1	8				10	26	30	56	3/6	2/6	8		5/	2/6	10. 6	day of January
James Howard	1	1	2	1	2	2	9	30	22	52	3/6	2/6	3		5/	2/6	8. 15	1791.
Samuel Howard	1	1	2				4	27	12	39	3/6	2/6	4		5/	2/6	7. 4. 6	Drury Ragsdale
Wm Starke	1		2	3	2	3	11										....	King William,
John Hollins	1	1	3				5	27	6	33	3/6	2/6	4		5/		6. 9. 6	Virginia
Mrs Hawse		2	1	1	2	3	9	22	18	40	3/6	2/6	5	3	5/	2/6	7. 14. 6	Sept. 24th 1791
Charles Lipscomb	1	2			1	1	5	35	15	50	3/6	2/6	6	1	5/	2/6	9. 12. 6	
Peter Richeson	1	1	5	3	2	3	16	112	35	147	3/6	2/6	16	5	5/	2/6	28. 12	
Edd P. Chamberlayne	1		2	3	4	6	17		70	70		2/6					9. 15	
Wm Newman	1		3	4	5	5	19	75	70	145	3/6	2/6	12	9	5/	2/6	26. 0	
Drury Ragsdale	1	1	2	8	4	3	19	200	70	270	3/6	2/6	14	15	5/	2/6	49. 2. 6	
Total Amt of the whole	20	26	50	58	61	86	301	907	1007	2014			152	108			£507. 2. 0	

[Endorsed] Return of Manufactures by D. Ragsdale

actually taken upon 20 Families in his Neighbourhood comprehending all classes from the richest to the poorest.

imported cheaper than we can make them owing to the want of slitting mills) in short, almost every article in iron (except the more refined cutlery) can be made as cheap and I think of Better quality than what is imported to us from Europe, but it may be necessary to remark that Iron comes dear to us in the Middle Counties* generally retail'd at 4^d p^{lb} and considered as a cash Article.

[Endorsed] Extract of Drury Ragsdale's letter
to E. C. with a neighbourhood
return of Manufactures in 20
Families comprehending the various
Classes of life from the richest
to the poorest.

* Middle Counties here are not meant of the whole State but the interior parts of the lower Country, or those which are distant from the trading Cities or Towns. E.C.
[This note appended by Edward Carrington.]

(46)

EDWARD CARRINGTON to HAMILTON, *transmitting letters.*

RICHMOND October 8th 1791

Sir,

Since mine of the 4th Instant, covering some information upon Manufactures, I have received an Additional report from General Stevens, Inspector of Survey N^o 2, which, together with his letter, and a Copy of one he received from one of his Collectors, I now do myself the pleasure to enclose.¹ It was my intention, at first, to have obtained the Reports of all the Inspectors, and then have made a general one, with certain allowances, and remarks, for you. this would have been attended with but little trouble, and although you was good enough to desire that it might be dispensed with, yet I should have done it. The detached manner in which my information comes, & the late period at which I should be enabled to communicate it to you, were I to delay for this purpose, dictates the greater

¹ See the two letters immediately following including the "Additional report" as an enclosure in the first one.

propriety of complying with your dispensation, and giving you the information by parts, as it comes in. You find that Gen^l Stevens & M^r Ragsdale, have, both, reported the domestic manufactures made in twenty families, comprehending the various classes of life, from the richest to the poorest: this is done in consequence of a request I made of each Inspector, in order to form a principle of calculation upon the whole number of families in the State, expecting such reports might enable us to judge how far a general principle of calculation might be relied upon, or what deviations might be proper to lead the nearest the truth. You will observe that each of these reports already received, take in the whole year 1790; the others will do the same, and as they come to my hands, they shall be forwarded to you.¹

The enquiries upon this subject gave rise, at first, to suggestions from the Enemies of the Government, that the object was, a Tax upon manufactures. this led to the necessity of the Inspectors effecting their enquiries in such manner as would not favor such an alarm, and this they have been so judicious in, that there is nothing said about it now. indeed it is generally viewed in the true light as leading to some project for the encouragement of home Manufactures.

I am with the greatest respect

Sir

Your most ob. s^t

ED CARRINGTON

Supervisor D. V. [District of Virginia]

Alexander Hamilton Esq

[Endorsed] 8th Oct^r 1791

Col Carrington

2^d letter

¹ Apparently these additional reports were never received by Carrington. At least nothing corresponding to this description is to be found in the Hamilton Papers at Washington.

(47)

EDWARD STEVENS to EDWARD CARRINGTON, *on manufactures in Culpeper County, Va.*

Edward Stevens served with distinction in the Revolutionary War and later (1782-90) became a member of the Virginia Senate. He was appointed inspector of revenue by Hamilton, and as such he transmitted this letter to Edward Carrington, the supervisor for the state of Virginia.

CULPEPER COURT HOUSE *October 6th 1791*

Sir

Expecting this to be nearly about the time you would wish to be receiving the reports respecting the manufactures of this State, I have made Out and now Inclose you such a one as (I conceived) you required of me; at least as nearly as was in my power, And I hope it may be such as will answer.—You will understand the information was taken entirely from persons of this County, indeed I found great reluctance in many of my Acquaintances and refusal from others, at least their conduct produced the same effect, as they never could find a proper time to detail to me or set down an Acc^t themselves—I trust it will make no deference my geting the intelligence entirely from persons of this County, as I think the circumstances of all the Countys in my Survey is nearly similar, as to Cultivation produce and Domestic manufactures; except perhaps one or Two of the little County's in the Lower parts of it.—In averaging the prices of the deferent Articles, I governed myself from the information as well as by the following principles. The Linnen Cloth made by the Rich is generally for their negroes which is coarse, that made by the midling kind, a great proportion is also used in the same way, and that by the lower Sort for their own wear therefore a greater part of their's would be somewhat of a finer Quality. In the Woolen Cloth both the Rich and the meddling by what I could learn was nearly the same Kind for negroes, and Children some of it mixted colours & others, in the Shape of a Stuff which is imported from Britain and called Jersy's. The poorest people among us raise few or no Sheep, and what wool they commonly have I fancy is mostly made into Stockings. The Cotton Cloth made by the Rich a great proportion is for Coverlets, Bed-

tyckes, Mens wear Jeans &c which is valuable. It is also nearly the case with the meddling or at least what they may be deficient in Coverlets Jeans &c they make up in Womens fine Gowns. The poorest is generally coarse. With respect to Stockings and Shoes, The Rich commonly purchase the greater part of the fine Kinds which they wear and the other Classes dont make such use of them, therefore after taking into Acco^t that the largest Quantity are for negroes and the poorest people, think I may be pretty near the value of [these]¹ Two Articles

I have received one report of the Stated Trades, or rather a List of the names of the deferent Tradesmen, distinguishing whether living in Town or Country; from M^r Adams of Loudon, he says it [was not]¹ in his power to do more, he seems to be of a disposition to oblige and has the Character of a very active, attentive Industrious good man—I have also received from M^r Yancey of Louisa by way of a paragraph of a Letter something on that subject, but in order to give you a better knowledge of it, than a description, I have taken the Liberty to inclose you a Copy.²

In what manner do you wish me to hand them to you? I mean as to wait^g until they all come forward to me, and make a General report. I am with very much respect

Sir

Your most hum. Serv^t

EDWARD STEVENS Inspector
Revenue Survey N^o 2

[Addressed] Col^o Edward Carrington
Supervisor, District of Virginia
Richmond

Edward Stevens
Inspector Revenue

[Endorsed] From Edw^d Stevens
Inspector of Survey
N^o 2—with a return
of certain Manufactures

¹ These words inserted by Edward Carrington.

² Mr. Yancey's letter is reproduced immediately below. The "List of the names of the deferent Tradesmen" seemingly was not transmitted by Stevens to Carrington.

[ENCLOSURE]

Account of Manufactures in 20 Families of Va.

Account of Manufactures made in Survey No. 2 by 20 Families from the Richest to the Poorest in the Space of One Year from the 1st January to 31st December 1790

Classes of Four Fam- ilies in each Class	[1]	[2]	[3]	[4]	[5]	Average price of each Article wch was obliged to be con- jectural				
	Linnen Cloth Yards	Yarn Cloth Yards	Cotton Cloth Yards	Stock- ings dift kinds pairs	Shoes dift kinds pairs	Lin: Cloth	Yarn do	Cotton do	Stock- ings	Shoes
First	187	225	700½	51	112					
Second	225	95	440	46	57					
Third	320	24	296	40	38					
Fourth	254	"	177	28	17					
Fifth	109	"	68	9	13					
	1095	344	1681½	174	237	1/6	2/6	3/6	4/6	6/8

	[£ s d]
[1]	82. 2.6
[2]	43. 0.0
[3]	294. 5.0
[4]	39. 3.0
[5]	79. 0.0

537. 10. 6¹

Note in some instances there was a little mixed Cloths. I should have made a Column for it but as it was not taken notice of in your request, was apprehensive it might derange your System, therefore I proportioned it according to the Stuff it was made of

EDWARD STEVENS Inspector
Revenue Survey No. 2
October 5th 1791

[Endorsed] Return of domestic manufactures in 20 Families in Survey No. 2, comprehending the various classes in life from the Richest to the Poorest, by Edw. Stevens, Inspector.

¹The numbering of the columns and this computation of the aggregate value of the Manufactures were inserted by Edward Carrington.

(48)

CHARLES YANCEY to EDWARD STEVENS, *on manufactures in Louisa County, Va.*

Copy of a Letter from Mr Chas. Yancey of Louisa.¹

Inclosed you will receive a list of the Stills with their Contents in our County you will please to excuse any Inaccuracies in the want of form as I have been greatly hurried in the Business owing among other causes to the want of Health and being anxious to make my return by the time you directed having found it a very fatiguing troublesome Business. However I have been happy to find the People willing to submit to the duties though not without some disapprobation of the Law through Ignorance of the true meaning, but after explaining the same appear to be tolerably satisfied—And agreeably to your directions I have appointed persons to receive the returns of all the Stills within ten Miles of each of them, to wit Capt James Dabney in the lower part of the said County, and Mr William Wash in the upper part of the said County, so that at present there are Offices opened within ten Miles of every Still in the County, and in order to give the Business the greater Credit the persons I have appointed are of the best Credit & Character, with respect to the other requisitions of the Secretary I do not well know what to say as I have so little time and their being no publick manufactures in our County except one gun Smith to wit Francis Giddins who Works part of the Year at that Business, And one Wheel rights Shop, to wit Butler Bradburn, though there Are several persons that do something at the Business in the Winter Season, when their Crops are Secured &c. We have a Considerable Number of Carpenters Joiners and Blacksmiths. the latter is chiefly done by Blacks but little more is done then Working and farming Tools &c. Manufactures of Common home Spun is very Considerable in private Families, but we have no fulling Mills in our County. a pretty deal of Cotton &

¹ The copy was made by Edward Stevens; see letter of Stevens to Carrington, p. 105, above.

The greater part of this letter, as will appear, is concerned with Yancey's duties in collecting the internal revenue duties on stills imposed by the act of March, 1791.

Flax is raised;¹ wool is on the Increase And the Culture of Tob^o is on the decline.² The farming Business is gaining the assendencey among our people, and upon the whole we are on rising Ground & becomeing more wealthy and Independent. As to the defects of the Excise Law, I have had very little leasure to peruse it or to spend much thought about it but think if the Collectors in the deferent Counties were Aided & Assistants it would be convenient. And that the profits at present are no ways equal to the expence and trouble & suppose few in the County can find their Account in holding their Appointments—You will please to signify to me any further Instructions that may be necessary as I shall be happy in rendering any service I am able while in my present Office I am &c

P. S. The Price of M^r Giddins Rifles is £4 and smooth Boars £3 the Price of Cart & Waggon Wheels are various from 30/ to 50/ According to their size. Tanneries we have none but in private families since Mr. Culp has removed.—the time I have marked against the Stills being employed is as near as we could guess at the usual time. Though few of them will be employed this Year as we have very little fruit there are also some few Stills in the Country not noticed, as they are not intended to be used and are not in furnicies.

[Endorsed] Copy of a letter from
Chas. Yancey Collector
in Louisa County, Survey
No. 2 to Genl Edw^d
Stevens Inspector,
upon Manufactures

¹ An "and" was struck out by Edward Carrington and replaced by a semicolon.

² Here Carrington struck out a semicolon and an "and", inserted a period, and capitalized the succeeding word.

MISCELLANEOUS DOCUMENTS ON MANUFACTURES

(49)

SAMUEL PATERSON to HAMILTON, *urging bounty for emigrant European workmen.*

The only evidence that I have discovered as to the identity of Samuel Paterson is contained in a letter which he wrote to Hamilton dated September 30, 1790 (reproduced in Hamilton's *Works*, John C. Hamilton, Editor, vol. V, p. 459). In this communication, which seems the first he had written, it appears that he "was enticed" to address Hamilton because he was a well-wisher of liberty in America, and because he admired Hamilton's report to Congress on the state of the finances—that of January 14, 1790. At this time, Paterson sent certain pamphlets in which he thought Hamilton might be interested:

"1. *State of public debts of Britain and a plan of redeeming them*, by Dr. Price [apparently the pamphlet called *The State of the Public Debts and Finances at the signing of the preliminary articles of peace in January 1783; with a plan for raising money by public loans, and for redeeming the public debts*, published in 1783 by Dr. Richard Price].

"2. *Report of the Select Committee of the House of Commons on the Income and Expenditures of 1786.*

"3. *Book of Rates* which contains the Custom-House Duties.

"4. *Yearly Tax Tables*, which contain the Inland and Excise Duties."

It does not appear that Hamilton received communications from Paterson other than the one just mentioned and the one now reproduced in the text.

EDIN^r [SCOTLAND] 10 Feb^y 1791

Respect^d Sir:

When I wrote you formerly, It was Just when a Trunk was packing up for my freind Rob^t Campbell Bookseller—My haſty Scrawll & D^r Prices Pamphlets in the way it was Sent, I hope youll Excuse, Their is No clean Copy of it to be got,—At that Period I did not know that the inclosed State of the British Custom house Dutys &^e was published, Youll Notice this now Sent is by Authority of the British Government. Their is no other List of the Inland Taxes but that by Kearsly which is said to be very exact,—Youll receive along with these Two Vollumes of Sir John Sinclair upon the Revenue of

Great Britain, He is a Member of the British House of Commons of Parliament.—¹

I by no Means wish to engage your Most valuable time, by answering me, But I have to Sollicit you upon an affair, that if it is not hurtfull, Very hurtfull to the Intrests of the United States, I know your own humanity will be a powerfull Agent in My behalf; This will I find make my letter longer than I intended, But it is Respected Sir On the footing that a By-stander will often Notice what reall Actors doe not discern, Nay Solomon, that Wise King, says "that a fooll may teach a Wise man wisdom at a time"—I theirfore doe it with that deference, that becomes me when writing you on any affair belonging to the, United States, and with a sense of that Ignorance I must have at this distance of the true Intrests of America.—

I beg to Sollicit you, in behalf of the Poor, hard wrought, half fed, Inhabitants of Europ² And would humbly propose, as they are Utterly unable to pay for a Passage to America, the only thing that Stopts thousands of them from Emigrating I beg theirfore, that you would Employ & use your Intrest, to procure a Grant of Some Bounty or Relaxation of the Duties, to European Shipping bringing over Poor Industrious workmen to America

Suppose the Tonnage Duty, upon Foreign Vessels Should be relaxed, to answer as a Bounty. Suppose for every 15 or 20 Passengers Brought from Europe the Vessell was to have an Exemption of the Tonnage Duty upon 100 or 130 Tons & so on.— Nay not only that But as Passengers often want to goe to a Certain Port, Say Philadelphia for Instance, & the

¹The documents spoken of in the above paragraph may be described as follows: "Dr. Prices Pamphlets" obviously is a reference to the one already mentioned in the introductory note at the head of this letter. His use of the plural possibly refers to an inclusion of Dr. Price's *Postscript to a pamphlet on the State of public debts and Finances*, which was published shortly after the original.

The *State of the British Custom house Dutys* apparently is an official document, although I can find none preserved in the British Parliamentary Papers which seems to fit this description.

Possibly Kearsley's *Annual Tax Tables* is the "*List of the Inland Taxes*" referred to. A periodical of this title is entered in the catalogue of the British Museum with dates of 1795, 1797, 1798, and later years.

Presumably the "Two Vollumes" mentioned are Sinclair's *History of the Public Revenue of the British Empire*, published in 1785.

² Cf. letter of the British Hosier, reproduced below, pp. 183-184.

Owners of the Vessell want to bring a Cargo of Tobbacco from Virginia,— The foreign Vessell or the Extent of Tonnage in proportion to the passengers, she brought, Might be allowed without, any duty to take in goods for the Port she designed to Load at.— This or some other Plan is Necessary to assist Emigrants from Europe to America, Journeymen of all Professions—(a few of the fine arts exceptd) are unable ever to Collect or save out of their Wages, a Sum equall to paying their whole freight to America, From Greenock or Glasgow to America—It is Six Guineas for a Steerage Passenger.—

It may be answered Why not grant, priviledges or Bounties to the American Bottoms, *only* for bringing over tradesmen— In answer, I say, its impossible for the American Ships, to Carry over emigrants from Europe So well as Foreign Ships— The Penalties & Forfeitures, are so very heavy & so easily incurred, that No person Unacquaint with the Laws durst Venture upon Such a Measure—But the European Captain & owners know how to agree with Passengers so as to Escape the Penalties. In Britain the Penalties are £500 St^r & 6 M^o imprisonment for every person Indented to goe out of the Kings Dominions,¹ & I know not the Laws of Ireland, far less of any other Part of Europe, with regard to this —

I have hitherto only Mentioned the Poor of Britain but in other parts of Europe I am informed, their working people are in a Worse State, & less able to pay for their Passage to America —The Germans are a most Industrious people, the United States would I hope be greatly benefeted by a Number of Germans imported every Year—I think the draining one part of Europe of these Industrious poor, that may be said to be able with every exertion they Can make only to be able to Keep Soul & Body together,—would have a Beneficial effect; upon the Treatment the poor would have in other Parts— No Doubt, a few would goe also from Britain if encouragement was given, & I hope they would be found also Very industrious Subjects for here we are overstocked with people.—

O Let the Name of the United States Rise high in the Annalls

¹ This penalty presumably refers to that carried in the British law (22 George III, c. 60) against enticing artificers out of England, though the penalty for a first offense is there specified as a £500 fine and 12 months' imprisonment per workman enticed, and a £1200 fine and 12 months' imprisonment for each successive offense.

of Fame, by Extending her Bounties to enable the Industrious Poor of Europe, to Sitt down on her fruitfull Soill, & be feed liberally by produce of her Lands.—But as the Proverb says a Word to the wise is Enough.—

I hope Respected Sir that filled with admiration of your Conduct, as Exhibited in Congressionall Register &c youll pardon this freedom, my Zeall for the good of Mankind, & my Esteem for one, who endeavours to Remove a Load of Debt from a Rising Nation of Free Men, have emboldened me to write this. Again I will not trouble you. Nor engross your Valuable time— If you knew the State of the Laborious Poor in Europe, as well as I; your own Compassion & humanity— would not need to be desired to Remember them. by Respected Sir

Y^e most hle Serv^t

SAM^l PATERSON

P. S. A half penny or even a farthing, upon every pound of Tobbacco Exported from the United States would not affect the Consumpt^t & would be a good Fund for Bounties to Emigrants—If the United States, Cannot impose it,¹ the States that export Tobbacco Might by such a Tax, provide an Excellent—fund for Publick Roads—Canalls &c & the Sale would never be a Singlue pound less in Europe —

Many people here are of opinion, That the Prospects & flourishing State of Britain, Is owing far more to the Establishment of *Bank's* then to the Nationall Debt—Certain it is that Scotland alone owes allmoſt all its Improvement in Agriculture Commerce & Manufactures to the Institution of Banks —Their are about Fifty Banks in England and about Thirty Banks in Scotland, that Issue out Notes.—²

S. P.

¹ Perhaps referring to the constitutional prohibition on export taxes.

² See the section of Hamilton's Report on the assistance which banks can render to domestic manufactures, p. 272, below.

It is possible that a passage in the Report (p. 319, below), where Hamilton proposes the creation of a fund "to defray the expenses of the emigration of artists and manufacturers in particular branches of extraordinary importance", was inspired by this letter from Paterson.

(50)

PRINTED EXTRACTS *from the American Museum* by WILLIAM BARTON, *regarding domestic manufactures.*

Little information is available concerning William Barton. Apparently he was a lawyer practising in Philadelphia, was a brother of Benjamin S. Barton, professor of natural history and botany at the University of Pennsylvania, and in 1813 wrote a life of David Rittenhouse. The following article by Mr. Barton appeared in the *Transactions of the American Museum*, vol. VII, pp. 285-292.

May 21 1790

[Addressed] For The Hon^{ble} A Hamilton Esq^r
from the Writer.¹

[1790] Remarks on the state of American manufactures and commerce:

To the printers of the Museum

GENTLEMEN,

If the following cursory remarks, on the state of American manufactures and commerce, contain any useful information, you are requested to give them a place in your valuable repository. I am, gentlemen,

your humble servt.

W. BARTON

The great importance, considered in a national point of view, of encouraging manufactures and the useful arts, in this extensive and growing republic, is not so generally acknowledged, as to admit of no controversy. Many able pens have been employed, in demonstrating the good policy of the measure; and the essays we have made, in the establishment and progress of divers valuable branches of manufacture, within three or four years past, already evince the practicability of our succeeding upon a more enlarged scale. Experiment has justified the theories of those writers, who, have uniformly asserted, that the institution of manufactures in the united states, would be so far from impeding the progress of agricultural improvements, that they would mutually benefit each other—turn our

¹ Notation in Mr. Barton's handwriting.

commerce into a profitable channel—and eventually promote the wealth and prosperity of the country at large.

It cannot but afford a great degree of satisfaction to the well-wishers of the union, when they observe the spirited exertions which have been made by our citizens, since the peace, to institute many new and extensive manufactures; and the rapid advance towards perfection, in those heretofore established in several of the states. Among the most important of our manufactures, may be reckoned the following: ship-building—flour—malt liquors—fabrics of wool, flax, hemp, and cotton—iron and steel, under various modifications; a principal one of which, is the article of nails—leather, and the numerous fabrics of this material—paper, and the printing of books, &c.—pasteboard (including playing cards)—parchment—pot and pearl ashes* tobacco and snuff**—beaver hats of a very superior quality and hats of other kinds—cabinet ware and carpenters' work—thread, cotton and worsted hoisery—wool and cotton cards—cables and cordage—coaches, chariots, and carriages of other kinds—clocks and watches—printing types—brass founders' ware—pewterers' and tin-plate workers' ware—coppersmiths' ware—plumbers' work—silver plate and jewellers' Ware—glass—potters' ware—gunpowder—cheese and butter—calico, linen and cotton printing—indigo—oil*** lumber****—tar, &c. soap and candles—glue—silk—refin'd sugars—starch, and hair powder—whips and canes—book-

* The value of pot and pearl ashes exported from Boston, in the year 1787, is estimated at 103,383½ dollars. In the following year, there were exported from New York 13,500 barrels of pot-ash; which, at a very low valuation, was worth 200,000 dollars.¹

** Foreign snuff was imported in very considerable quantities, before the revolution; but now the country is amply supplied with this article by our own manufacturers. Anderson (in his history of commerce) asserts, that before the war, the annual import of tobacco into Great Britain, from Virginia and Maryland, amounted to 96,000 hogs-heads; of which 13,500 were consumed in that kingdom, and the remaining 82,500 were exported from thence to other parts of Europe. This trade alone employed 330 ships, and 3,960 seamen.²

*** The oil exported from Boston, in the year 1787 amounted to 229,626⅔ dollars, in value.

**** The lumber of all kinds exported from Boston, in the year 1787, is estimated at 214,367 dollars value.

¹ The footnotes indicated by asterisks appear in the original document.

² Anderson, *History of Commerce*, vol. V, p. 250.

binding—brushes of all kinds—surveyors' compasses, with a variety of mathematical and optical instruments, and mechanics' tools—musical instruments of various sorts—divers kinds of drugs—distilled liquors—cider, &c.&c.&c.

Some of these materials,* which are themselves the product or fabric of manufactories, give employment to workmen in various branches of business. Thus, ship-building employs (besides the builder) carpenters, sail-makers, smiths, painters, carvers, plumbers, &c. Leather (comprehending the several kinds of this article) is wrought up into shoes and boots, saddlery, breeches and gloves, coverings of trunks and books, &c. Paper and pasteboard are used by the printer, paper-hanging maker, book-binder, card-maker, &c. And, in this manner, the product of one manufacture serves as a material, in the fabrication of others; thus furnishing employment and a comfortable subsistence to a numerous body of valuable citizens.

The materials, employed in the greater part of our manufactories, are almost wholly the product of this country. These, if exported in their crude or unwrought state, would yield comparatively small returns. The labour and ingenuity bestowed upon the fabric, by the manufacturer, create, in most cases, the greater part of its value: and, therefore, the industry and genius of our mechanics and artisans may be considered as a valuable portion of the productive stock of our country. Their numbers add to the national strength—and their labour to the wealth of the union generally, and of our towns in particular: they defray their proportion of the public expenses, and by creating a demand for the product of our farms in a twofold point of view, give additional value to landed property.

Ship-building is a branch of manufacture which bids fair to arrive at great perfection in this country. The beauty, cheapness and excellence of the American ships, are too well known, to need any comment. This is a business that appears to be peculiarly well adapted to the American states. Within the country, are to be obtained all the materials—even the sail-cloth; which is now manufactured at Boston, in large quantities,

* In the museum for September, 1787, is a list of raw materials and native productions which now are or may be readily furnished by the united states of America; and of such articles, and branches of manufactures and the useful arts, as are best adapted to the resources and situation of this country—for home consumption and use, and for exportation.

and of a superior quality. Mr. Shaw's ship the Massachusetts, of 800 tons burden, designed for the East India trade,¹ was furnished with cordage and sail-cloth from the Boston factory; taking, of the latter article, nearly 12000 yards. Besides this ship, three other Indiamen have been wholly clothed with it; as well as a great number of other vessels, of different descriptions. The sail-cloth made at the Boston factory is from no. 1 to no. 8. inclusive; and it is expected that 2,000 yards per week, will be supplied from thence.

Breweries are multiplying very rapidly; and spirituous liquors, so destructive of health, are giving way to the increasing use of porter, ale and beer*—There are it is said, fourteen breweries in the city of Philadelphia alone.

The manufacture of woolen cloth is, as yet, quite in its infancy among us: but enough has been done in this way, to shew that much more may be accomplished by industry and perseverance, aided by a little enterprise. Excellent cloth is made in Connecticut:** and the woolen manufactory, established at Watertown in Massachusetts, under the direction of mess. Faulkner and co. promises great success. It is hoped our farmers will redouble their attention to the raising of sheep.

The manufacture of cotton is encouraged in several of the states. This commodity is the growth of the southern states; and it cannot be doubted, that they will find it their interest to promote both its culture and manufacture. In the eastern and middle states, it will answer very well to work up even the foreign cotton, into jeans, fustians, corduroys, &c.

The culture of hemp and flax deserves particular attention. From these large supplies of cordage, and linen cloth of

* The increasing demand for malt-liquors, has induced our farmers to cultivate larger crops of barley; and our breweries may be amply supplied with excellent malt, of home manufacture. Hops, equal to any in the world, are produced in this country.

** Upwards of 5000 yards of woolen cloth were manufactured at Hartford, between the 1st of Sept. 1788, and the 1st of Sept. 1789,—some of which was of so excellent a quality, as to sell for five dollars per yard.²

¹ See Thomas Randall's List of Ships, reproduced below, p. 159. Samuel Shaw had this ship built at Quincy, Mass. It was launched in September, 1789, and on it he made his third voyage to Canton (Quincy, *Journals of Major Samuel Shaw*, pp. 117-118).

² For a further account of the Hartford Company, see the letters, included in this series, of Peter Colt and Elisha Colt to Governor John Chester, pp. 5-11, above.

various kinds,* may be drawn: and the flax-seed is, besides, an object of considerable importance, as an article of export.

Iron may be deemed one of the staple commodities of this country; as the united states abound with this article, of an excellent quality. This invaluable metal is of such extensive and indispensable use, that it may be justly esteemed one of the greatest sources of wealth we possess: and there is scarcely any material, that employs so great a number of artisans and mechanics, in a variety of manufactures. All the coarse and heavy manufactures of this article may be advantageously carried on among ourselves: besides which, there are many others,** lately introduced, which are found to answer very well. It is supposed, that, in the three states of Pennsylvania, New Jersey, and Delaware, there are manufactured annually, about three hundred and fifty tons of plate iron and nail-rods. Nails are becoming an object of export; and this is also the case with wool and cotton cards, and several other articles of American manufacture.

Our fabrics of leather might be rendered much more valuable to the united states, than they are at present, if the farmers would employ oxen more generally in husbandry; and if buckskin breeches were as commonly worn as their wear is economical—the manufactures of tanned leather are, notwithstanding, very prosperous.

Paper is now supplied in such large quantities, and on so good terms, principally from the paper-mills in the middle states, that the importation of foreign paper is nearly at an end. In Pennsylvania, New Jersey and Delaware, there are sixty-three paper mills;*** in which are made, annually, about 250,000

* In the year 1701, the linen and linen yarn, exported from Ireland, amounted to no more than £53,000 sterling; and, in the year 1771, the amount was £1,895,000 sterling.

** Mill saws, saws of other kinds, and files, are manufactured in the best manner (and, at least, as cheap as they can be imported) by mr. John Harper of this city. Stirrup-irons, bridle-bits, and other articles of sadlery ware—by mr. Thomas Bennett, of Lancaster in this state, who conducts, this branch on a large scale. Locksmiths' work and cutlery are executed by many ingenious workmen, in different parts, of the union particularly in this state.

*** 2,400 dollars, per annum, are paid for rags, to supply the paper-mills in Connecticut: and there are annually manufactured in that state, above 5,000 reams of paper, besides pasteboard, presspapers, &c. the value of which is upwards of 9,000 dollars. (See the museum for January, 1790, page 24.)

dollars worth of paper. The enterprise and spirit of our printers deserve particular commendation: at the same time that they are promoting the useful manufactories, connected with their own business, they are a principal means of disseminating useful knowledge throughout the union. Newspapers are now established in all our considerable towns: the museum and a magazine are published, monthly in this city; and are well conducted—besides two or three miscellanies of the same kind, in other parts of the continent: valuable European works are frequently re-printed in America: and mr. Thomas Dobson, of Philadelphia, is now engaged in reprinting the *Encyclopaedia*, upon an improved plan, from the last British edition of that extensive work—The execution of the undertaking, hitherto, is in such a stile,* as fully merits the liberal patronage it has obtained from a discerning public. [There are actually at press, in different parts of the union, no less than five or six editions of the bible—one by mess. Hodge, Allen and Campbell, of New York—one by mr. Collins, of Trenton—one (it is said) by mr. Thomas, a most excellent printer, at Worcester, Massachusetts, whose performances reflect credit on his profession, as well as on himself, and have deservedly gained him the character of the American Baskerville¹—one by mr. Young of this city—and one by the printers of the museum.]²

Paper-hangings, equal in quality and cheapness to any imported, are manufactured in large quantities by mr. William Poyntell and messieurs Le Collay and Chardon, at Philadelphia; by messieurs Mackay and Dixey, at Springfield in New Jersey; and at other places in the union.

A great progress has been made in the manufacture of hosiery, in this country; and, with proper encouragement, much more may be accomplished in that branch. Mr. Burnaby (in his travels through the middle settlements of North America in the years 1759 and 1760) notices the high estimation in which the Germantown stockings were then held: and this gentleman mentions his having been credibly informed, that two years

* The paper is of American manufacture—the types were cast by messrs. Baine, of Philadelphia—and the plates are engraved by mr. Robert Scot, also of this city.

¹ John Baskerville (1706–1775) was a celebrated printer who devised many improvements in printing and enjoyed a wide reputation in his art.

² The material here placed in brackets appears in the article but in the margin there is a note in Barton's handwriting "added by the Printers."

before that period, there were manufactured, in that town, sixty thousand dozen pair; the common retail price of which was a dollar per pair¹ This, however, is conceived to be a mistake—It is probable, that six thousand dozen pair was meant, as a redundant cypher (perhaps an error of the press) makes the difference. Admitting this to be the case—and supposing that stockings of such a quality, manufactured abroad, would have cost the importer six shillings and three pence, or five-sixths of a dollar per pair; the actual saving to the country, by that number, amounted to 60,000 dollars. Besides this, a number of valuable citizens were supported by the manufacture, and the raw materials were supplied from our own farms. The writer of this paper does not know what quantity of hosiery is annually made at Germantown: but great improvements are daily making there, in this manufacture—worsted, cotton, and thread stockings, of an excellent quality and fabric, may be purchased at that place (and twice a week at the market-house in that city) at very reasonable prices.

Wool and cotton cards, of American manufacture, now wholly supply the consumption of the country—they are not only superior in quality to the British but cheaper.* The principal manufacturers of this article are mess. Nathan and David Sellers, and mess. Westcott and Adgate, of Philadelphia; and messrs. Giles Richards and co. of Boston.

Our farmers are directing their attention to dairies: and we are now furnished with large supplies of excellent American cheese.

The establishment of glass-houses would prove so beneficial to the undertakers,** in many situations within the united states—that a very few years will probably place them among our most considerable manufactories.

The great and increasing consumption of window-glass and bottles, in this country, should operate as a powerful motive for encouraging the glass-manufactories already established in

* Wool cards have been exported from this country to Great Britain: and our manufacturers of this article have undersold the English in their own country. (See the museum for January 1790, page 24.)

** Prior to the year 1746, Ireland imported glass from other countries. At length, the Irish began to make some progress in this manufacture; and, in 1781, they first began to export glass.

1 Burnaby, *Travels through the Middle Settlements in North America*, 1759–60, p. 81.

some of these states, and for promoting the speedy establishment of similar works in other parts of the union.—The glass manufactory on the Patowmack, it is said, gives employment to five hundred persons.¹

The printing of calicoes, cottons, and linens, may be expected to increase, in proportion as we extend the manufactures of those articles: and the muslins and white calicoes imported from India, will likewise give employment to our calico printers. Mr. John Hewson and mr. Robert Taylor, both in the neighbourhood of this city, are masterly workmen in this branch: the former obtained a premium from the manufacturing society, for the best specimens of printed goods.²

In the state of Pennsylvania there are twenty-one powder-mills, capable of making six hundred and twenty-five tons of powder, per annum. This is retailed at five dollars per quarter, of 25 lbs; and is offered for sale in larger quantities, under sixteen dollars per cwt. The English price, after deducting the bounty of $4/6$, is $75/6$ sterling; or, about sixteen dollars and seventy-eight cents, per cwt. Independently of the importance of this article, as a means of national defence, the manufacture of it in this state is worth two hundred thousand dollars per annum. It is said, that the largest gunpowder works existing any where, are those at Frankford, near Philadelphia—now the property of mr. Joseph J. Miller. The mill-work is constructed on the model of mr. Rumsey's improvement of Baker's mill; mr. Miller having purchased a licence from the patentee.

So much is done by the sugar-refineries at Philadelphia, that although the medium of the annual import of brown sugar, into this port, is 5,692,848 lbs. the amount of loaf sugar*

* From the 18th of March, 1784, to the 17th of March 1785, there were imported to Philadelphia 8,406,000 lbs. of brown sugar, and 58,675 lbs. of loaf sugar. Of the former, were exported 667,687 lbs; and, of the latter, 19,800 lbs. The import of brown sugar to Philadelphia, from the 1st of November 1786, to 31st October 1787 (inclusive) amounted to 5,616,000 lbs; and of loaf sugar, but 2,362 lbs—434,762 lbs. of the brown sugar were exported. In the year 1787, 63,752 lbs. of loaf sugar were exported from the port of Boston. The progress that is making in the manufacture of maple sugar, will greatly lessen the demand for foreign sugars.

¹ This apparently refers to a glass manufactory in Alexandria, Va., which was visited by M. De Warville in 1788, and from which he reported exports in 1787 of 10,000 lbs. and the employment of 500 hands (Bishop, *op. cit.* vol. I, p. 242).

² The Pennsylvania Society for the encouragement of Manufactures and the useful Arts was instituted in 1787. As to the premium awarded John Hewson, see Bishop, *op. cit.*, vol. I, p. 407, and Bagnall, *op. cit.*, pp. 110-111.

imported here is only 4,480 lbs. This business is also carried on, at other places in the union.

The annual amount of melasses, imported at Philadelphia, averages about 543,000 gallons; a great proportion of which is converted into spirits, in our distilleries: but, in the eastern states, this manufactory is much more extensive; insomuch that the New England rum* is a considerable article of the American commerce. It is not to be expected that the use of ardent spirits will ever be entirely dispensed with; and, therefore, so long as we continue to import great quantities of West India rum and of brandies for our own consumption, we may wish success to our distilleries.

The culture and manufacture of silk are yet in their infancy, with us. In Connecticut, indeed, this valuable article has obtained a respectable footing; through the skill and perseverance of mr. Nathaniel Aspinwall¹ (who may be truly stiled the promoter of the silk-culture in that state) and under the patronage of the venerable and public-spirited dr. Stiles.²

The writer of this article has observed, with pleasure, the laudable endeavours of mr. Aspinwall, to promote the culture of silk in Pennsylvania and New Jersey: this indefatigable person has propagated many thousands of the Italian white mulberry-tree, in the vicinity of this city: and there is good reason to expect, that, in a few years hence, the citizens of this state will derive ample profit from his labours. The mulberry tree, independently of its furnishing the best food for the silk worm—is a valuable timber for ship-building; and, had it no other advantage, would, on that account alone, be worth cultivation: it does not impoverish the soil; and its fruit is desirable on a farm, for poultry and hogs. When the citizens of the southern states, shall conceive a proper idea of the immense emoluments, which they may derive from the culture of silk, in their climate, their interests will undoubtedly impel them to the attainment of advantages so obvious, and easily acquired.

* The New England rum exports from Boston, in the year 1787, is estimated at 223,380 dollars.

¹ See Mr. Constant Southworth's letter of September 1, 1791, to William Williams, published in this series, pp. 44-46, above.

² Dr. Nathaniel Aspinwall and Dr. Styles, President of Yale, were instrumental in getting passed an act of the Assembly in 1783 granting a bounty on silk (Bishop, *op. cit.*, vol. I, p. 361).

The article of flour may be considered as a manufacture; and, though among the last noticed, it is, perhaps, one of the most important, even in that point of view. The exports of flour from the port of Philadelphia, for the last four years, amounted to 941,000 barrels; of which quantity, 369,000 barrels were exported in the last year.

The other manufactures which have been enumerated, besides many not particularized, are conducted extensively—employ numerous hands—and save large sums to the nation. There are great numbers of excellent and ingenious artisans*, distributed throughout the union: and it ought to be the pride of every American, (as it is certainly his interest) to give a liberal preference to the fabrics and manufactures of his own country. It would prove a vast source of national wealth, in a country possessed of so many advantages and auxiliary resources.

To the increase and improvement of our manufactures, the favourable turn, which the commerce of this country with foreign nations has taken, within a very few years past, may, in a considerable degree, be attributed. The imports from Great Britain alone, into those provinces which now constitute the united States, averaged, during the term of eleven years before the revolution, (viz. from christmas 1762, to christmas 1773) 10,792,906 dollars and sixty-six cents, per annum: and the exports from the same provinces to Great Britain, during the same term, averaged, annually, only 5,562,004 dollars and forty-four cents; leaving a balance against this country, upon that trade, of 5,230,902 dollars and twenty-two cents, per annum. In the debates in the house of representatives, on the 15th instant, Mr. Madison stated the whole of our annual imports from Europe, at 13,506,666 $\frac{2}{3}$

* Among others, I cannot omit mentioning two ingenious artisans, of this city, who merit encouragement: for, although the value of the work executed by them, in their respective branches of business, cannot amount to a great deal; yet, if the demand for their manufactures should increase, they will be enabled to bring up apprentices to their trades, and by that means, extend the business.—Mr. John M'Allister, whip and cane maker, manufactures large quantities of these articles—superior in taste and workmanship, and inferior in price, to those imported from Europe—His whips are plaited by a machine of his own invention,—or, at least, greatly improved by him, in the construction: and both whips and canes are completely finished in his factory. Mr. William Healy, silver plater, is a masterly workman in his branch of business; and his plated work is much more substantial than that which is usually imported.

dollars; and from the West Indies, at 4,121,946 $\frac{2}{3}$ dollars; making in the whole, 17,628,613 $\frac{1}{3}$ dollars. The exports from the united states to Europe, he estimated at 14,233,101 $\frac{1}{3}$ dollars; and those to the West Indies, at 4,184,675 $\frac{1}{2}$ dollars; amounting, together, to 18,417,776 dollars and a fraction: which leaves a balance of 789,163 dollars, in our favour.

It appeared in evidence, before the British house of commons, in the year 1775, that, in the year 1764, the four New England provinces employed, in their several fisheries, no less than 45,880 tons of shipping, and 6002 mariners; and, that the produce of their fisheries in the foreign markets, for that year, amounted to £322,220 sterling*—also, that those fisheries had increased after that period. It was likewise in evidence before that body, in the year 1784, that, before the war, there was a balance of £300,000 sterling on the West India trade, in favour of the Americans; for, the annual average value of exports from North America to the islands, as estimated at the port of importation—freight included—was stated at £720,000; while our imports from thence, freight included, were said to be only £420,000 sterling. Admitting, however, that both of these estimates were just, (although the statement of the American profits on their West India trade, appears greatly over-rated; which was the opinion of several respectable witnesses, who gave their testimony to the British parliament, on the same occasion) we will assume the aggregate of those profits, as the amount of the balance that arose prior to the war, on the whole foreign commerce of this country, exclusive of its trade with Great Britain: or, in case this should not be thought a sufficient allowance, let us add, £57,294 sterling for the profit on our trade with Portugal, &c. And then deduct all these profits (or supposed profits) from the balance formerly against us, on the trade to Great Britain—yet, even in this case, there appears to have been a balance against us, on our whole trade, before the revolution, of about £497,438 sterling;

* The fish of all kinds exported from the port of Boston in the year 1787, amounted, in value, to 642,469 dollars; of which sum, 595,809 dollars were the amount of the shipments to foreign ports. The oil exported from Boston to foreign ports, in that year, is estimated at 150,306 2-3 dollars—The whalebone, in like manner, at 21,933 1-3 dollars, and the spermaceti candles, at 14,200 dollars—Hence it appears that the produce of the New England fisheries exported from Boston only, to foreign markets (in the year 1787), amounted to the value of 782,249 dollars.

equal to about 2,210,837 dollars. If, therefore, our European and West India trade now yield a balance, in our favour, of 789,163 dollars (as is asserted, on so respectable an authority as Mr. Madison) the difference in favour of our present commerce to those countries, is 3,000,000 of dollars per annum, compared with its state at the former period.* From Christmas 1783, to Christmas 1784, the imports into the United States from Great Britain, amounted to 16,213,382 dollars; and our exports, thither, were estimated at no more than 3,285,908 dollars; so that there stood, against this country, the enormous balance of 12,927,474 dollars! In the succeeding year, the imports from Great Britain were lessened 5,955,496½ dollars; and the exports increased 685,628½ dollars: consequently the adverse balance of the trade with Great Britain, in the year 1785, was less, by 6,641,125 dollars, than in the preceding year. At present, the commerce of the United States is in a flourishing condition. Even an inconsiderable balance** in our favour will soon enrich the country, provided proper measures be adopted to promote a brisk circulation of money, in our

* Independently of our commerce with Europe and the West Indies, we now employ a considerable number of large ships in the East-India trade. As we are now enabled to import, directly from Asia, those commodities, which, before the revolution, we were obliged to procure at second-hand (and through the medium of monopolizing companies) from Europe; this trade must necessarily be an advantageous one to the United States: for, the most considerable articles imported from the East Indies have, by long use, become in some measure necessities of life.

** It deserves to be noticed, that notwithstanding the commerce of Great Britain is said to have never been in a most prosperous situation, than since the peace—yet there was a balance against that nation, in the year 1784, of £311,727 sterling; and, in the three following years, the medium of the annual balance in her favour was only £500,183 sterling. In all the former years, up to the year 1700 (excepting 1781) the balance, in favour of that nation, has never been below a million sterling; and, generally, between that sum and six millions. The quick circulation of money in that kingdom, occasioned by their extensive manufactories, great internal trade, and the regular payment of the interest on their public debt, contributes greatly to their national wealth. Sir Josiah Child observes, in his discourse on trade (written about the year 1678) that if the navy debt, &c. were all paid, and if for the future, all the public creditors were to be paid with punctuality—it would much increase the stock of the nation in trade: “such fatal stops”, says he, “being to the body politic, like great obstructions of the liver and spleen to the body natural, which not only produce ill habits, but sometimes desperate and acute diseases, as well as chronical.”¹

It may be proper to acquaint the reader, that most of the calculations in this paper, relative to the British imports, exports, &c. are deduced from estimates given by Anderson, in his history of commerce; a work replete with important information on that subject.

¹ Sir Josiah Child, *A New Discourse of Trade*, 5th edition (1751), p. 129.

internal negotiations; as by this means, industry will be enlivened, and all the wheels of the great commercial machine will be put in motion. .

The natural riches and resources of this country are, by their own energy, forcing themselves into operation: and, if we continue, by unremitted exertions of industry and economy, to draw forth the means of wealth, which, as a nation, we possess, the united states cannot fail of becoming a great and prosperous empire.

Agriculture, the great basis of commerce, is cultivated by many men, of liberal and enlarged minds, who are introducing among our farmers improved methods of husbandry. The farmer and the manufacturer, besides advancing each other's interest, will jointly promote that of the merchant—for, although our imports may be diminished, the exports will increase; and an extensive trade will be cultivated between the several states, for an interchange of their various goods, products, and manufactures: and this intercourse will have a powerful and happy effect, in cementing more strongly the several parts that compose this great republic. When all these interests are properly combined—and an uniform system for the regulation of our commerce and the protection* of our manufactures, shall have been organised by the general government—then will many of the yet dormant resources of this great country be brought forward, and its means of wealth be rendered efficient.

Philadelphia, May 21, 1790.

[Endorsed] Extracts from the American

Museum

by W Barton

relating to *Manufactures*

* A judicious imposition of protecting duties, would greatly assist, in promoting the success of our manufactories; and perhaps the appropriation of bounties, in some instances, might prove very beneficial.

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PART II

Letters Relating
to the
Trade with China

Trade with China

(51)

THOMAS RANDALL, *late vice-consul at Canton, to HAMILTON, on American trade with China.*

Thomas Randall was a prominent New York merchant. He had been chosen a member of the committee of 100 to control the affairs of the city in 1775, and was the principal founder of the Marine Society of New York. As this letter indicates, he sailed as joint supercargo on the first American ship that went to trade in Chinese ports. Later he served as American vice-consul at Canton.

An account of the original voyage which took Mr. Randall to Canton was prepared by Major Samuel Shaw, chief supercargo, and was subsequently published as a government document. It deals less thoroughly and less picturesquely with the conditions of trade in China than the ensuing letter. For Major Shaw's narrative, see *Journals of Major Samuel Shaw* (Josiah Quincy, editor), pp. 131-214.

NEW YORK August 14th 1791

Sir

Agreeably to your request, I shall endeavor to communicate, in as clear a manner as my abilities will admit, the ideas which result to me, from my experience in the trade from this country to Canton.

It is needless to a gentleman of your historical information to make any remarks on the representation given by writers, on the government of China, as they must be merely speculative, and would not in the least elucidate those points of information, which you wish to consider, from the noble motive that actuates you of endeavouring to promote and secure a happy and prosperous trade to your country; but, it may be necessary to detail to you, how the merchants from this country trading to Canton, actually feel and suffer under the operations of the Chinese government, and which injuries, perhaps, may be remedied by regulating the mode of conducting the trade from hence to that port—I shall therefore begin with a recital of events & facts.—

In the year 1784, On the 22^d of February, the ship *Empress of China*, being the first ship that ever sailed from the United States for China, was sent to Canton by a company of American

Merchants; her cargo consisted of Spanish dollars,¹ about four hundred peculs of ginseng,² a pecul being $133\frac{1}{3}$ ^{lb} English Avoirdupois³ some cordage, wine, lead, iron, a few furs, with other trifling articles not worth enumerating—in this ship I went as a joint supercargo with Samuel Shaw Esq^r the present Consul at Canton, our reception from all the European nations who had factories there, viz the English, Dutch, French, Danes, Swedes, and imperialists,⁴ was friendly and polite, from them we endeavored to obtain all the information we could respecting the Chinese, and the mode of transacting business with them, we were informed that our ship must be measured in order to Ascertain the port duties she would have to pay, that the trade was put by the Chinese government in the hands of a body of Merchants, then eight in number, called Hong Merchants, that we must obtain one of these merchants, as a security merchant whom the Mandarin^{*} considered as responsible in his own person and fortune for all the improper conduct or trade that might be committed by the ship, that this was expensive and no one would accept it, unless we dealt with him, and the appearance of our trade promised him a handsome profit, but, in this instance, on our application to the first Hong merchant named Pankikoa, he consented to become Fiador, or Security merchant for the ship, however, it may be here necessary to remark, that when the funds of a ship are small, and that every Hong merchant declines the office, the whole body of them under the name of the cohong are considered as security for said ship, and they name the first merchant of their number to act in that capacity, each

*Mandarine a term for every Officer of government whether civil or military. [Note by Randall.]

¹ The Spanish dollar, which was coined from Mexican silver and held constant in weight, was used for generations in Oriental trade. It was used as the model for our silver dollar which was adopted in 1791 as a result of Hamilton's proposals, and was approximately equivalent in value.

² Commercial "ginseng" was the root of a plant (*Aralia quinquefolia*) grown in the eastern United States, and closely allied to the oriental ginseng (*Aralia Guinseng*) which was highly valued by the Chinese as a tonic.

³ A weight used quite generally in China and the Orient.

⁴ The Imperial East India Company was chartered by the Emperor of the Holy Roman Empire to trade between Ostend in the Austrian Netherlands and the Indies. It was sometimes called the Ostend Company. The traders were predominantly English. (H. B. Morse, *Chronicles of the East India Company*, vol. I, p. 161.)

paying their portion to him of the loss he sustains, in consequence of the trade of the ship not being sufficient, to enable him to pay the extra fees extorted by the mandarines. this merchant grants all your permits for either discharging or taking in your cargo. Our business of a Security merchant being settled, and our ship measured, we conceived ourselves at liberty to trade with any individual of the Cohong, or whom else we pleased, but in this pursuit we soon found ourselves exposed to intrigues of which we were not apprized.

We experienced that this body of Hong merchants possessed more power than we were aware of, that they had an influence over all the other merchants in Canton who are obliged to trade under the Chop, or permission of one of these Hong merchants, who each of them had their class of friends, and that private merchants could not ship any goods they might vend, or bring up any they might purchase, or even go to look at goods, without the Chop, or particular permission of one of the Hong merchants, that Pankikoa our security merchant was a mandarine, as well as a merchant of great opulence, and had an influence over all the rest of the Hong Merchants, and that not one of them would make us an offer equal to Pankikoa, who himself offered us but one hundred & fifty dollars the pecul, a price we thought far inferior to what we could get, if we could obtain a freedom in our trade, perhaps Pankikoa in conjunction with the other Hong Merchants, had monopolized the business of purchasing our genseng, the only article of much consequence in our cargo, and over awed the other merchants not of the cohong from making us any offers, for future experience has led me to conclude, and the fact has been verified, that this body of Hong merchants sometimes have agreed together to affix a price at which they would purchase merchandize, and that each individual of them has broke his engagement to the other, by giving a higher price, perfectly relying on the integrity of the European, that he would not betray him in the price given, but the fact being discovered, they have come to open rupture, broke their compact, and by court or mandarine influence, if I may be allowed the term, in gratification of their revenge ruined the weak hong merchant of their body, who has been so unfortunate

as to be detected, although every one of them had been guilty of similar conduct —

In further confirmation of what I have writ, I must add that we were applied to by private merchants, who did go down to the ship to examine the genseng, came up, and offered us conditional prices according to the quantity we might sell, and that they would leave us earnest money to secure the purchase of our genseng at the price agreed on, which merchants have had the assurance and baseness to return next day, breaking their agreement & telling us they would give but one half of the price they had actually agreed to purchase for the preceding day, and others told us, they would, but could not purchase for fear of drawing on them the resentment of the Hong merchants, thus situated, new Adventurers in this commerce, anxious for the interests of our employers, and our minds agitated with doubts, we advised with an European friend, who told us, he knew of no remedy, but to wait and exhaust the Chinese patience, a difficult thing to do, if we had not resources independent of that article for our return cargo, especially as we had a larger quantity of genseng than ever had been brought to the Chinese market. thus circumstanced we delayed selling our genseng from the time of our arrival which was the 27th August, till the 22^d of September, when we sold to Shykinkoa, a hong merchant, for one hundred and fifty five dollars the pecul, but were afterwards obliged to abate five dollars on the pecul in consequence of it not all proving equal to the sample given.—

I shall now make a few remarks on the article of genseng, and the quantity at market that season, and observe upon the sales of the remainder of the Cargo.—

Quantity of Genseng at market in the year 1784

brought by ship Empress of China	445
Portuguese ships	300
English ships	135
about ten peculs of old genseng	
remaining at market	10

890 Peculs

the whole of this genseng was sold according to quality, and at various prices, from one hundred & fifty to three hundred & fifty dollars the pecul, but in the year 1783 it had been sold for three thousand dollars the pecul.—I have further to observe that after the sale of our genseng to Shykinkoa, he offered to release us from our engagement from which we judged that he had no idea himself of it's being a very lucrative bargain to him, and he did return us a small quantity of six or seven peculs belonging to the officers of the ship of better quality, and which we afterwards sold for them, at one hundred & eighty and two hundred dollars the pecul—the remainder of our cargo sold for about the cost, the cordage and wine being bought by Europeans, the lead, iron, furs &c by the Chinese—lead is an article though it seldom yields any profit, will always sell for Cash, ours sold at four taels* per pecul—there was but three or four tons of iron belonging to the officers and I imagine it would have been very difficult to have got rid of a larger quantity.—

I shall now proceed to relate a second and third voyage.

My second voyage commenced in February 1786 and we returned 2^d August 1787. there is scarcely anything new worthy remarking in the course of this voyage, than that there were four American ships at Canton of about three hundred tons burthen each, that the quantity of genseng brought that season to market was upwards of two thousand peculs, which sold from one hundred & fifty, to two hundred dollars the pecul, according to the quality, and the extortion of the mandarines for fees of every kind had rather increased, our funds were small, and quite inadequate to the voyage, we were therefore obliged to obtain credit, and was defrauded in the quality of the teas, they not proving equal to the samples tried, and for which we in our next voyage obtained an abatement—I shall therefore without delaying your time proceed to relate my third and last voyage, which commenced in December 1787 and was intended for India & China in one season, but some unexpected delays taking place at Madeira and finding on my arrival at Madras the market glutted with

* 10 Cash makes a candareen
 10 Candareen a mace
 10 Mace a tael

72 cand. = Spanish dollar. [Note by Randall.]

wine, the article of which my cargo was chiefly composed, but however having sold a part of the wines I proceeded to Batavia, where they granted me permission to sell the remainder of my wine, which I could not effect the market being glutted, and leave to purchase sugars, which I did, and carried to Bombay, where I sold the remainder of my wine, and obtained a handsome profit on the sale of my sugars—from Bombay I took a freight of cotton for Canton where I arrived the 16th of October 1789 and from thence took in a Cargo for this port where I arrived the 29th July 1790.—

From Batavia by an English East India company's ship, I shipped my genseng to China, which arrived there in the beginning of the year 1789, which was sold by my agent there for 65 dollars the pecul, and to take bohea tea in payment. large quantities of genseng also arrived in the year 1789—say upwards of two thousand peculs, and the price fell to fifty five dollars, to receive teas in payment, and I believe genseng of a tollerable good quality, would not have sold for Cash, for more than forty dollars the pecul, however.—to conclude my remarks on the article of genseng, it appears to me from what I have observed respecting it, that there might be shipped to Canton annually from this country five or six hundred peculs, & perhaps a larger quantity, even to nine hundred peculs, provided, more was exported from this country to Europe, although the Hong merchants say two hundred peculs annually, would be sufficient for the supply, and for that quantity they could contract to give a high price, that is four hundred dollars the pecul. this genseng however, should be of the best quality, and well garbled,¹ in this situation, and the quantity not exceeding five hundred peculs: I believe it would bring readily five hundred dollars the pecul, especially as teas would be received in payment —

In Canton it is customary, unless a contrary agreement is made, for the Chinese to pay all duties either of import, or export, owing to the difficulty the Europeans have of determining what the duty really is, or perhaps there is none, but what depends on the caprice of the Mandarin, and varies very often the same year, they say genseng pays a duty to the

¹ "Garble" is an old word meaning "pick out the best". See also the word "cull" used in the second paragraph below.

Emperor of sixty dollars the pecul, they therefore start into bags all the genseng they purchase from the Europeans, and Americans, previous to their bringing it up from the ship to Canton, as the Mandarines in weighing it, would make little or no abatement for tare if brought up in Casks, it is also to be observed that bad genseng pays a duty the same as good, and the bad being mixed with the good, it is a work of time to separate it, therefore every pecul of bad genseng adds to the cost of the good, for this last season although they bought the whole, good & bad together, yet after its being weighed to ascertain the quantity, and having allowed the price agreed for, yet they desired the worst to be thrown away, as not being worth the amount of the duty paid on it.—

I am led from an examination of the Tartary genseng, which still sells for nearly its weight in gold, to conclude that this country produces two species of genseng, *one of* them nearly of equal quality to the Tartary genseng provided proper pains was taken to gather it in due season, and care taken in properly drying it—but this I think cannot take place at present, as the trade is on the decline, and probably may be totally lost in the hands of individuals, it requiring too much capital for a single merchant to risque, and when a company is formed, it is made up in such a hasty manner, that they are obliged to purchase such genseng as is at market, and have never carefully attended to have it well garbled—genseng shipped from England, though originally from this country, is in higher repute on this account, for they more carefully cull it.—

This year immense quantities of cotton was shipped by the English, on board their own and foreign bottoms, from Bombay and a small quantity from Madrass to Canton, estimated to be one half more than the annual demand, which, however, had increased, it was said owing to the failure of the Chinese crops, and the increased demand for tea, making them attend more to the culture of that article, near fifty thousand bales of cotton arrived, averaging about four hundred pounds English weight per bale, this reduced the price from fourteen and fifteen taels the pecul, down to eleven and twelve taels cash, the cotton being at a high price, and freight at Bombay, the shippers suffered considerable loss, and were obliged also to credit the Chinese merchants a season over for large balances due them,

on account of the sales of their cotton to them, these cotton ships, as well as other ships from Bengall, and other parts of India, (commonly called Country Ships¹ do not frequently get all money for their cargoes, and as they take but little merchandize in return, they therefore sell it to the Chinese, and transfer the debt to the English East India company, and receive bills from them on London, at twelve months sight, at 5/3. to 5/6. Stg for the dollar. however this exchange varies, and the rate is declared by the English company's super-cargoes at Canton every season. The English company therefore guard as carefully as they can, against English subjects trading to China, purchasing bills of any other person, as it saves them from making a considerable remittance in specie. but, it is what they cannot intirely prevent.—

I shall now relate a few things respecting the sale of the sea Otter skin, that has been lately sold in China, both by the English and American vessels.—

The ship Columbia, Robert Gray Commander, a vessel fitted out from Boston, arrived at Canton November 18th 1789,² with about fifteen hundred sea Otter skins of various sizes and quality, the Commander of which ship valued upon me for the transaction of his business, and I expected to have made a very advantageous sale of those skins, from there being much wanted by the Mandarines, Pingua, a Hong merchant, and others informed me, that probably, I should eventually obtain my price, if I waited with patience, as the Cohong, or body of Hong merchants would be obliged to purchase them & present the best to the Viceroy of Canton, and the other Mandarines of rank, that the Hong merchants would have to divide the cost of this involuntary present with each other, and that the remaining number of small skins would sell but for a trifling sum, also that no private merchant would dare to purchase them, as they were known to be wanted by the mandarines for their own use.—I therefore, in order to make the best of the market, as Captain Gray had no other funds, advanced the necessary money to refit his ship to take in a cargo for America,

¹ English ships plying between Canton and the several ports of India were called "country" ships. They were not on the same status as the officially registered East India Company ships.

² Included in Mr. Randall's list of ships at Canton, see p. 159, below.

and upon an estimate of the highest price I might probably obtain for the skins, found the sum would be insufficient, after defraying the expences of the ship, to load her fully with bohea teas, I then determined to fill up on my own account with that article on freight, in order to render the voyage as lucrative as possible to the owners, with this idea, I contracted for the amount of bohea teas I intended to load on board the ship, and no part of my business as yet suffered any delay—After some difficulties in obtaining a security merchant for the ship, owing to the nature of her cargo, and the smallness of her funds, I was at last informed by the linguist, that she was secured in the name of the Cohong, and that Monqua, the then head hong merchant would grant a chop for landing my skins at the factory, this was accordingly obtained, but produced an Altercation between Pingua and myself, who said it would be a great injury to him, as he rented me the factory, the other part being occupied by himself, that on the skins being landed there, the Mandarines would come to look at them, and whatever they took he must pay for, and from policy must give them as a present, or it would draw upon him their resentment, if he did otherwise, that I might land them at an European factory, where no Chinese merchant resided, and in that case he would be on a footing with the other Hong merchants, who would have to divide the Amount of whatever skins the mandarines might take, and each pay his part of it, being unwilling to injure Pingua, with whom I was on friendly terms, I obtained a factory for the purpose, the skins were brought up, and accordingly stored there.—

My patience was now exhausted by the various and continued applications to examine the skins, offers made to purchase, accepted by me, and then broke upon the part of the Chinese, who informed me they could not buy for fear of the mandarines, matters continued thus through the months of December and January, when a private Chinese merchant offered to buy them provided the Hong merchants would grant me in writing permission to sell them which I applied for but could not obtain, he then made another proposition, that he would buy them, provided I would secure him from there being taken away afterwards by the Mandarines, or the hong merchants; there appeared to me something insidious in this proposition, and

I answered I could not undertake to protect him against his own government. Pingua soon after informed me, the Viceroy had given orders to Monqua the head hong merchant to purchase them, in order that he might make choice of the best, and there came out from the city a Mandarin of rank, who I was informed was an Officer in the Viceroy's family, he had them sorted, and made choice of about one hundred of them, and desired me by the interpretation of the linguist to fix my price for them, I told him I meant to sell them altogether, as parting with the best would injure the sale of the remainder, he then desired me to set my price for the whole, and if reasonable he would take them all, I accordingly did, and after some abatement he concluded to buy them, and desired permission to take those he had chose with him into the city, I replied that I could not suffer one of them to go from under my care 'till I was paid for the whole, he appeared incensed, and desired me to name the hong merchant who should pay me for them, which I declined, upon which he mentioned Pankikoa, the son of the Pankikoa named in the commencement of this letter, who was dead, and was succeeded by this son, knowing him to be an opulent hong merchant, I made no objection, The Mandarin then asked whether I would consent to have the bundle of skins carried to Pankikoa's house, and he would see me paid for the whole, I consented and accompanied them there.—Pankikoa was at home and as the Mandarin and he conversed in the Chinese language, I can only conjecture their conversation, and trust to the inquiries I made for an interpretation of it, Pankikoa expostulated upon his being obliged to purchase the skins, not having sold me any goods; a reason that did not appear to satisfy the Mandarin, who left him and went in his Palanquin into the City, after making some remarks which indicated that an incomppliance with his request, would be attended with serious consequences; after his departure the Chinese porters by the direction of Pankikoa took up the bundle of skins, with an intention of carrying them into the city, but I opposed it, and they laid the bundle down again, upon which Pankikoa appeared much agitated, told me I knew not the Chinese government nor what I did, that this was a great disgrace to him, and to use his own broken English expression said it was "a kill business"—in fact, what I under-

stood by the tenor of his language was, that the insult offered the Viceroy, was as much as his life was worth, and that it would ruin me, as well as himself, if the skins were not in the city that night, before the gates of it were shut—he asked what I would take for that bundle of skins now in his factory—I told him they were the most valuable part, and I must have half the price I demanded for the whole, which would amount to upwards of ten thousand Dollars. and I thought he meant to comply with my demand and pay me the money, for he called for the key of his treasury, but recollecting himself he sent for Mongua, Pingua, and some other Hong merchants, and the result of a long and passionate conversation, mixed at times with a good deal of adulation towards Pingua, was, as they interpreted it to me, that they had agreed to settle the matter amicably among themselves, and that Pingua with whom I had contracted for the bohea tea shipped on board the Columbia, would pay me the price I demanded for the whole of the skins, which Pingua assented to. as these were Hong merchants whose faces I was familiar with, who dealt for large sums, who trusted, and were trusted by every European—I thought it would be imprudent to hesitate longer, I accordingly consented, and they took the skins into the city.—the next morning I applied to Pingua for settlement, who referred me to Pankikoa, and they trifled with me by referring me back to each other for payment, at last Pingua offered to settle with me for the whole of the skins provided I took four thousand dollars less than the price agreed on before, observing that he would not furnish me with the passport for the ship Columbia to depart, and that I might remain at Canton 'till the next season, for ought he cared, that he had been deceived by Pankikoa, and the other Hong merchants who had promised to pay him their respective proportions of the price of the skins taken by the mandarines, that they had broke their promise, saying as he had sold me tea, he must buy the skins and take the profit & loss together, and that he should lose fifteen thousand dollars by the business in consequence of the Mandarines taking away all the best skins, and that I must also suffer some loss.—I waited a few days longer in hopes of Obtaining a more favorable conclusion to this business, when chance favored me with an opportunity of seeing the same Mandarin from the City, who had promised

to see me paid for the skins, he was at a Mr Beales factory, looking at some other skins of the same kind, I made application to him for redress, but could obtain none, I therefore from necessity was constrained to accept Pingua's proposition, upon which he obtained for me my grand Chop, or permit for sailing, and I left Canton the 15th of February 1790 for America being among the last ships that sailed, had I refused Pingua's last offer the ship would probably have lost her passage for that season round the Cape of Good Hope, for on the 17th February their holydays commenced, during which time their Public offices are shut, and no business transacted for near three weeks.—

The demand in China, for sea otter skins, and other furs of the best quality is very great, and if you do not depend upon that article for your return Cargo, and can wait the season over you may obtain a good price, but transient merchants are subject to many more frauds and impositions in Canton, than those who have an established residence there, however, the English company are not exempt from them, for in the year 1784 they united with the other supercargoes in Canton in complaint to the Hoppo* against the increased extortions & delays in trade, and were promised redress, but an unfortunate accident prevented, an English Country ship in saluting killed one Chinese and wounded two others, this brought on an event of a serious nature, for the Chinese seized the supercargo of the ship Mr Smith, and carried him into the City, declaring their laws required blood for blood, and unless the person who fired the gun was delivered up, they would detain Mr Smith, in this instance also all the foreigners united, and I must say attempted to frighten the Chinese, and had they possessed, firmness adequate to the undertaking, I believe they would have succeeded, for in point of real force or consequence, the Chinese are considered by most persons who have seen them, as very contemptible, however importantly they think of themselves, but to proceed, the Europeans brought up to the factories between four & five hundred seamen armed, we also had an armed boat up from our ship, on their passage up from Wampoa¹ to Canton, a distance of twelve miles, they

* The Mandarin who superintendends the trade at Canton. [Note by Randall.]

¹ Wampoa or Whampoa was the port of Canton.

were opposed by so trifling a resistance on the part of the Chinese, as only slightly to wound but one man, the boats passing in the night without returning their fire, on the arrival of the boats from the ships the Chinese Citizens deserted the suburbs, and the Mandarines of war next morning, drew up an Armed force in the Common boats of the river, opposite the factories, their arms consisting of Bows & arrows, swords, spears, and Match lock fusees, with two or three Cannon of about one pound caliber, mounted on a kind of three leg stools, and the boats which contained their soldiers were sculled by the women, who ply on the river for maintenance; the Chinese soldiers preserved the most perfect silence; and paid a ready obedience to orders. Negotiations for settling the matter amicably now took place, and the Chinese had the address to detach the other foreigners from the English, who at last thought it most prudent to compromise the matter by delivering up the gunner, whom they now said should only be tried by their laws, and as it was well understood to be an accident he would be returned unhurt, in the interim they restored Mr Smith, and trade took place again, but they basely broke their promise with respect to the gunner, for soon after the sailing of the European ships, they hang'd him, nor did they afterwards remove any of the impositions on the trade complained of but rather increased them¹.—

I shall now mention an instance to point out the necessity of a nation showing an active protection to their subjects trading to China, the Mandarines for some illicit act of a hong merchant, confiscated all the property in his possession to whomever belonging, and sent him into banishment in an interior part of the country, nor could the English Country supercargoes² get any restitution of their property 'till the British nation sent a frigate, the Sea horse, Cap^t Panton, with orders officially to demand and insist upon redress, and take such steps as he should think likely to obtain it, Captain Panton by a spirited conduct produced the desired effect, for the Mandarines after giving Captain Panton a hearing, directed the Hong Merchants to compromise the matter with the

¹ The Journals of Samuel Shaw, *op. cit.*, p. 186, also gives an account of this incident, though in less detail.

² The term "Country" here refers to "Country" ships; see above, p. 136, note 1.

English company's supercargoes, which they did, and settled the debt by installments.

Their mode of increasing their impositions upon all strangers is by stopping your trade, and even your supply of fresh provisions, knowing that the delay in your business as the season wears away, would eventually be more expensive to you, than to comply with their demand —

It is supposed that the Emperor is a stranger to this mode of conduct, an Ambassador was lately sent out from England, with an intention to obtain an audience with the Emperor and have some general laws established for the regulation of the English trade at Canton, but the death of the Ambassador during the passage, occasioned the ship to return, there being no successor appointed to carry the commission into execution, but it is expected they will again send one.—

The English have of late shipped from England to Canton a quantity of tin, which they say the Chinese prefer to the Calin¹ that the Europeans procure from the different Malay settlements, however, it is my opinion, that the Americans might also make a profit on procuring Calin, and other Articles from the Malays if they were sufficiently united in pursuing the Commerce to China to enable them to extend their views to the different objects of commerce that would present themselves.

I shall enclose to you extracts from the English companies directions to their supercargoes,² also a list of the articles of import & export of the port of Canton³, with a list of all the ships at China in the year 1789.⁴ I must remark that the two ships at Canton in the enclosed list, viz the Washington, and the Moise, were totally foreign property—the Washington & the Moise were I believed owned by Merchants at the Mauritius, the Moise, I had purchased of the Commander, Capt. Oriolle, but finding it inconvenient to send her to America, I afterwards resold her to him, the other ship, the Washington, was commanded by an American, but from every inquiry I

¹ Calin was a compound metal made of lead and tin, which was used by the Chinese in making tea canisters, etc.

² The extracts referred to here are published in this series: see pp. 146-156, below.

³ This list of imports and exports does not appear in the Hamilton Papers, and seemingly is lost.

⁴ The lists are presented in this series, pp. 157-159, below.

believe the property belonged to the French, and the American flag used to guard against the French Agent at Canton—the American Schooner *Grace*, was sold to an English subject, who sailed with her for the Northwest coast of America under American Colours, the unauthorized use of American Colours, may require some particular directions to the Consul at Canton, for his conduct on such an occasion, in the present instance, I thought it most prudent to pass it unnoticed, as a want of instructions upon the subject, might have rendered an interference productive of more evil than good.—

On considering the disadvantages, the Americans trade under to Canton, owing to their separate interests, and their not having established factory there, it appears to me they require greater encouragement for the prosecution of it, by laying heavier duties on teas imported from Europe, for we still receive a considerable quantity of bohea tea from Amsterdam, although the Dutch are now prohibiting any teas being received in their ports, from America, Bohea tea is an article of great consumption here, and being bulky would enable us to employ larger ships in the Canton trade, by which we should save considerably in port expences, at Canton, as each ship, however small, is obliged to pay besides her other expences, the present to the Hoppo, which is about two thousand eight hundred spanish dollars.—

With respect to Spanish dollars, the only kind of specie, which answers to export to China, and the command of which will always give you the preference, of the Market, I feel myself unable to judge of the amount that it would be necessary to annually ship for want of information of the Consumption of teas yearly in this country, and the quantity of Silks, Nankeens Porcelain & other Chinese merchandize that would be required for a full supply for the United States. great quantities of raw silk are bought by the English dutch & french, and would also be an article of import to us, if we established any silk manufactures in this country—You will, with the information you possess of the trade of this country, and observing in the extracts from the English companies directions, the quantity of specie shipped by them, be enable[d] to judge how much it may require to carry on the trade from this country—The danes & Swedes trade principally with money,

and I think it probable we should save in the export of specie, considerably by a direct trade to China as we otherwise should be obliged to pay higher by purchasing the Merchandize of China from any other nation —

I shall now close this letter with remarking that frauds and impositions are practiced by the Chinese on every nation trading there, but on there being detected in Europe, they redress the established companies there, who have been cheated, the hong merchants declaring the fraud has been committed on them by the Country merchants, but individuals are much more exposed to them than those companys, from the idea that if they make a losing voyage they will not be able to return and of course will be obliged to bear the loss, nor can individuals obtain redress always, from want of property, and an idea that the Chinese have, that being transient merchants they cannot redress themselves, and of course they can oblige them to suffer the loss.—

I know a respectable and opulent mercantile house in this city, who have been greatly defrauded in the quality of their teas and nankeens, and as they owe the Chinese money are determined to retain sufficient in their hands to redress themselves. this leads me to remark the failure of the Imperial company at Canton, who owe the Chinese nearly two hundred thousand dollars, and they attempted to detain the cargo of an English country ship, which came consigned to Mr Reid, the imperial consul¹ and Chief supercargo of their company, but on the interference of the English Supercargoes it was paid for—how far, one American individual, may be made to pay the debts contracted by another, and thus annihilate the trade, future events may determine, it has been a maxim with the Chinese, that when they could find redress at home, never to seek it abroad, and I have heard remarks made by them, that in case of a long & great delay in payment, that it was probable they would seize the property of one American to answer for the debt of another, they therefore to avoid this evil, express their wishes to see the trade carried on by a steady body of Merchants from this country—but supposing no accident of this kind should happen, the act of one American individual may expose the trade of all the rest to be injured, I shall mention

¹ This term apparently signifies the consular officer of the Holy Roman Empire.

an instance respecting the English, a Country ship from Bengall, being unable to make an advantageous sale of her cargo, attempted to go away without paying her port duties, upon which the Hong Merchants told the English Company's supercargoes that they would stop the trade of their nation 'till the duties were paid, upon which they interfered & obliged the Country Captain to settle his account—how far these may be guarded against by instructions to a Consul resident at Canton, your good judgement can determine¹—

I have prolonged the subject of this letter beyond my intention, led by ardent desire to communicate every thing, I thought might be worthy your perusal— I must confess it is my opinion, that the trade to Canton will never flourish, but in the hands of a well regulated company, which will not be easily formed without the protection of government—for individuals have neither influence, nor consequence enough with the Chinese to withstand the rivalship of established companies—my own experience and situation in the trade enables me perhaps to pursue it with equal advantages to any private merchant, from which I might be excluded by an established company, but the desire of seeing the trade of my country prosper, supersedes every private interest— if what I have communicated should prove any way serviceable, it will afford great pleasure to

Sir

Your most respectful

very Obedient

And most humble servant

THO: RANDALL

late Vice Consul at
Canton in China

¹ For other accounts of conditions in Canton during this period, see Latourette, *Early Relations between the United States and China*, pp. 20-26; *Journals of Major Samuel Shaw* (edited by Josiah Quincy, 1847), pp. 131-214; and Morse, *Trade and Administration of the Chinese Empire*, chap. 9. Morison (*Maritime History of Massachusetts*, pp. 44-51, 64-78) gives a sketch of this early trade with China, but in one respect his account differs from that here presented: "Boston traders," says Morison (page 65), "acquired an esteem for the Chinese character that has endured to this day".

P. S. I last Saturday night received a Letter from Mr. William Whitesides, informing me that he had discovered one Chest of Hyson Skin out of some sold him by me, contained a black leaf something resembling tea, but of no possible use,—a fresh instance of fraud in the Chinese, and an additional distress to the individual, who pays a duty here on an Article of no value, and whose poverty might prevent his return to obtain satisfaction in Canton— I applied once for Doctor Hunt of the Ship Hope, who was cheated in Nankeens, but could get no satisfaction in Canton from the Chinese who sold it to him— however if I detect no further fraud in the sale of the remainder of my teas it will be lucky—we never examine every chest we purchase, only a few, as opening or boring the Chests, injures the tea.—

[Addressed]

Honorable Alexander Hamilton Esquire
Secretary of the Treasury
Philadelphia

[Endorsed]

on the Trade to the East Indies

August 1791

(52)

MATERIAL ON THE CHINA TRADE, *transmitted by* THOMAS RANDALL.

The following document apparently comprises the “extracts from the English companies directions to their supercargoes” referred to by Thomas Randall in the preceding letter to Hamilton on the trade with China (see page 142 above).

The date attached to the first “extract” is somewhat puzzling. It may refer to the time at which Hamilton made copies of these documents. The internal evidence, as, for example, the sailings of the vessels as given in paragraphs 36 and 64, as well as the date incorporated in the first table “Tea now / 18 Oct; 1788 / in Warehouse” indicates that this first transcription should have been dated about October 1788.

18 March

1789

Extracts
from the letters of the English company
to their Supercargoes at Canton

Par:30 We shall ship to You on the following Ships the under-mentioned quantity of Silver

Viz^t

Pitt	22 Chests	
Warley	30	
Rockingham	30	Note each chest contains 1000£
Europa	30	Sterling, and they increased the
Sulivan	30	quantity of Specie on dispatching
Nottingham	30	their last ships for 1789 100
D ^{ke} of Buccleugh	30	Chest or one hundred thousand
E ^l of Mansfield	45	pounds Sterling—I have known
Vansittart ¹	45	other years when they have
Ganges	45	shipped three million of dollars,
Lascelles	45	but other years less according to
Walpole	45	the quantity of bills they draw
Middlesex	45	on London & sell to the Country
King George	36	ships.
E ^l of Wycombe	36	Tho ^s Randall ²

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[35] The Consignments from hence this Season nearly consist of the following Articles—Viz^t

Cloth 1374 Bales— Long Ells 3350 Bales— Camblets
 37— Tabinetts— 29 Cases— Lead 1590 Tons—
 Copper 180 Tons

[36] The Cargo of the Nottingham has been delivered in as good condition as that of the generality of other Ships which circumstance may be attributed to her early Dispatch from China & a remarkable good Passage home. Notwithstanding the great Advantages which must have resulted to the Company in the safe Arrival of the Ship from the large quantity of

¹ The Vansittart was not included in Randall's list of ships entering in Canton in 1789. She was lost Aug. 23, 1789. See the *Register of Ships of East India Company*, 1760-1810 (compiled by Charles Hardy), London, 1811, p. 130-5.

² Notation made on the original by Mr. Randall.

Goods at half Freight yet we cannot think it advisable to adopt the stowage of Ships to the extent this has been carried and we are not without Apprehension that if the Nottingham had been exposed to an Enemy or met with a heavy Gale of Wind her situation must have been very critical¹

[41] Our Exports to you this Season will consist chiefly of—

1590	Tons Lead
1374	Bales Cloth
5350	D° Long Ells
27	D° Camblets
29	Cases Tabinets
2½	Tons Grain Tin
2½	.. Common D°
180	Tons Copper.

to which will be added some few other trifling Articles for the particulars of which we refer you to the respective Invoices of the Ships on which they will come Consigned

Tea — [59] — we deem it highly essential that you should be in the earliest possession of our Orders respecting the Quantities proper to be imported as a Supply for the Year 1790— We now transmit them together with the principles & Calculations on which they are founded.

[60] From a Perusal of the last Orders to Canton which were dated 28th December 1787, it appears the following Quantities of Teas were ordered to be sent on the Ships to arrive in 1789, exclusive of Private Trade

	<i>Invoice lbs —</i>
Singlo	5,496,934
Hyson	2,078,042
Souchon	631,056
Bohea	3,564,555
Congo	6,819,659
	<hr/>
	18,590,246

¹ The Nottingham sailed from the Downs April 10, 1789, and arrived there again on June 23, 1788. Her next voyage was from Feb. 27, 1789, to May 27, 1790. (*Register, op. cit.*, pp. 123, 132.)

which Orders were grounded on a Calculation that the following Quantities would be received in 1788, exclusive of Private Trade

	<i>Invoice lbs</i>	
Singlo	8,874,194	
Hyson	1,207,974	
Souchon .....	.....
Bohea	4,282,378	
Congo	4,478,169	
	<hr/>	
	18,482,715	18 842 715 ¹

[61] But as it was supposed it might not be possible to procure those Quantities exactly, you were ordered to add any deficiency to, or deduct any Overplus from the Quantities ordered to arrive in 1789.—

The Quantities arrived and expected in 1788 exclusive of private Trade are as follows —

	<i>Invoice lbs</i>
Singlo	6,548,448
Hyson	1,315,250
Souchon	1,392,784
Bohea	5,635,169
Congo	6,615,465
	<hr/>
	21,507,116

Received *more* than calculated

	<i>Invoice lbs</i>
Hyson	107,276
Souchon	1,392,784
Bohea	1,352,791
Congo	2,137,296

Received less than calculated

	<i>Invoice lbs</i>
Singlo	2,325,746

¹ Correct summation entered on original by Mr. Randall.

When the above Quantities are added to, and deducted from what was ordered to arrive in 1789, and allowing the exceeding of Souchon above what is ordered to arrive in 1789 to be placed to the Account of Congo—the Quantities to be expected in 1789, exclusive of Private Trade will be as follows

	<i>Invoice lbs</i>
Singlo	7,822,680
Hyson	1,970,766
Souchon .....	.....
Bohea	2,211,764
Congo	3,920,635
	<hr/>
	15,925,845

Private Trade to be expected to arrive

	<i>in 1789</i>	<i>in 1790</i>	<i>Total</i>
Hyson	349,328	366,794	716,122
Souchon ...	75,636	79,418	155,054
	<hr/>	<hr/>	<hr/>
	424,964	446,212	871,176

[62] The returning Ships of this Season should bring according to Act of Parliament¹ as much Tea, as when added to what is now on hand & what is expected will be sufficient to supply the Sales to March Sale 1792 inclusive —

¹ Acts regulating the trade in tea required that there should be at least four public sales of tea by the East India Company each year. At these sales there should be offered a quantity judged sufficient to meet the demand, and in addition the company was required to keep a stock equal at least to the consumption of the preceding year. Vide 18 Geo. II, c. 26; 13 Geo. III, c. 44; 24 Geo. III, c. 38.

	Invoice lbs					
	Singlo	Hyson	Souchon	Bohea	Congo	Total
Tea now/18 Octr 1788/in Warehouse unsold arrived & expected in 1788 including Private Trade	5,976,907	1,561,680	2,089,788	11,165,053	6,106,712	26,900,140
Ordered & expected in 1789	7,822,680	1,970,766	.....	2,211,764	3,920,635	15,925,845
Private Trade to be expected in 1789 & 1790 .....	.....	716,122	155,054	.....	.....	871,176
To be sent by the ships to arrive in 1790	2,895,663	1,694,624	275,231	2,566,339	7,400,840	14,832,697
Equal to the Sales to March Sale 1792 inclusive, according to the Deliveries from Septemr 1787 to Sept ^r 1788—including Private Trade	16,695,250	5,943,192	2,520,073	15,943,156	17,428,187	58,529,858

[63] Whatever Deviations may have been made from the Quantities expected to be received in 1789 as above, should be made good in what is expected to be received in 1790 by adding thereto any deficiency and deducting any Overplus, so that upon the whole, the Quantities to be received in the two years will be agreeable to this Estimate.

[64] The 18 Ships dispatched from England Season 1787-8 added to the Lord Camden & Minerva¹ which are sent from Bengal together with the 21 Ships now going out, will bring (exclusive of any Teas which may be loaded on the Botany Bay Ships) at least

lbs — 34,973,000 of Tea besides the Private Trade

Deduct — 30,758,542 expected in 1789 & 1790—according to
the above Estimate

leaves — 4,214,458,—which may be brought more than is

¹ The Lord Camden sailed for Bengal Jan. 6, 1787, and arrived back at Downs, England, July 9, 1789, while the Minerva left for "Coast and Bay" Apr. 1, 1787, and reached England again May 6, 1789. (*Registry, op. cit.*, pp. 118, 123.)

required to supply the Consumption, this together with any further Quantities the Ships may be capable of bringing, is to be assorted in proportions agreeable to the following Quantities, which is what was delivered from September 1787 to September 1788 —

Singlo	N ^t lbs	4,531,568
Hyson		1,613,150
Souchon		684,021
Bohea		4,327,429
Congo		4,730,508
		<hr/>
		15,886,676

The Singlo Tea to consist of 2/12^{ths} Hyson Skins
 5/12^{ths} Twankay
 5/12^{ths} Singlo

[65] The Plan of sending an encreased quantity low Souchon in lieu of Congo, will not answer, as the Consumers of Congo prefer it when good, to Souchon.—

20th March¹

1. From a Perusal of the Orders to Canton dated the 28th December 1787 it appears the following Quantities of Teas were ordered to be sent on the Ships to arrive in 1789 exclusive of Private Trade

	Viz ^t
	<i>Invoice lbs</i>
Bohea	3,564,555
Congo	6,819,659
Souchon	631,056
Singlo	5,496,934
Hyson	2,078,042
	<hr/>
18,590,246	

which orders were grounded on a Calculation that the following Quantities would be received in 1788 exclusive of Private Trade

¹ 1789 apparently.

The next few paragraphs are identical in sense, though not always in detail, with some of those preceding. Despite the repetition, it seems desirable to reproduce the document in full as it was found in the Hamilton Papers.

	<i>Invoice lbs</i>
Bohea	4,282,378
Congo ?	4,478,169
Souchon .....	.....
Singlo	8,874,194
Hyson	1,207,974
	<hr/>
	18,842,715

but as it was supposed it might not be possible to procure those quantities exactly the Supracargoes were ordered to add any deficiency to or deduct any overplus from the quantities ordered to arrive in 1789.—

The Quantities arrived in 1788, exclusive of Private Trade are as follows —

	<i>Invoice lbs</i>
Bohea	5,635,169
Congo	6,615,465
Souchon	1,392,784
Singlo	6,548,448
Hyson	1,315,250
	<hr/>
	21,507,116

Received *more* than calculated.

	<i>lbs</i>
Bohea	1,352,791
Congo	2,137,296
Souchon	1,392,784
Hyson	107,276

Received *less* than calculated

	<i>lbs</i>
Singlo	2,325,746

when the above quantities are added to and deducted from what was ordered to arrive in 1789 and allowing the exceedings of Souchon above what is ordered to arrive in 1789 to be placed to the account of Congo the quantities to be expected in 1789 exclusive of Private Trade will be as follows —

	<i>Invoice lbs</i>
Bohea	2,211,764
Congo	3,920,635
Souchon .....	.....
Singlo	7,822,680
Hyson	1,970,766
	<hr/> 15,925,845

As it was expected the Ships to arrive in 1789 might bring more Tea than what was ordered on Account of the Deliveries from Sept^r 1786 to September 1787 was sent with Orders to lade the surplus in proportions agreeable to that Account.

The quantities to be expected in addition in conformity to that Order are as follows

	<i>Invoice lbs</i>
Bohea	294,124
Congo	252,625
Souchon	35,590
Singlo	294,124
Hyson	92,690
	<hr/> 969,155

Therefore the whole quantity of Tea to be expected to arrive by the 20 Ships in 1789—exclusive of Private Trade will be

Bohea	2,505,888	
Congo	1,173,260	
Souchon	35,592	
Singlo	8,116,804	
Hyson	2,063,456	
	<hr/> 16,895,000	13,895,000 ¹

Private Trade to be expected to arrive —

	<i>in 1789</i>	<i>in 1790</i>	<i>Total</i>
Souchon ...	75,636	79,418	155,054
Hyson	349,328	366,794	716,122
	<hr/> 424,964	<hr/> 446,212	<hr/> 871,176

¹ Correct summation inserted by Mr. Randall.

	Bohea lbs	Congo lbs	Souchon lbs	Singlo lbs	Hyson lbs	Total Invoice
The Quantity of Tea now on hand ordered & expected in 1789 & 1790 and what the 21 Ships will bring in 1790 will together be lbs. 59,211,838, which should consist of the following Assortments according to the Deliveries from Michaelmas to Christmas 1788 ..	10,861,672	21,695,588	4,265,103	15,617,121	6,772,354	59,211,830
Tea unsold 26 Jan'y 89 including the Hilsborough & Private Trade	10,660,241	4,840,684	1,801,732	4,929,448	1,069,557	23,301,662
Ordered & expected in 89	2,505,888	4,173,260	35,592	8,116,804	2,063,456	16,895,000
Private Trade to be expected in 1789 & 1790 .....	.....	.....	155,054	.....	716,122	871,176
Deduct	13,166,129	9,013,944	1,992,378	13,046,252	3,849,135	41,067,838
Remains	2,304,457	12,681,644	2,272,725	2,570,869	2,923,219	
For the Exceedings of Bohea in proportions according to the Deliveries from Mich ^s to Xmas 1788—Deduct	Exceeds	1,034,051	203,283	744,341	322,782	
Remains the quantities which should be brought to com- pose the 18,144,000—by the 21 Ships now going out		11,647,593	2,069,442	1,826,528	2,600,437	18,144,000 ¹

¹ The meaning of this calculation seems to be as follows: Bohea tea had been brought, or within a certain time would be brought, to England in excess of the probable needs, to the amount of 2,304,457 pounds. On the other hand, a prospective deficiency existed with respect to the other four varieties of tea. Since the former was present or would be present in excess, there was less need for the latter varieties; and, accordingly, orders for teas to be shipped from China of these four types were scaled down in the aggregate by the amount by which bohea was in excess, while this reduction was distributed among the four varieties severally in accordance with the relative proportions of imports among these four items in the total importation between Michaelmas and Christmas 1788.

Whatever Deviations may have been made from the Quantities expected to be received in 1789 as above should be made good in what is expected to be received in 1789 by adding thereto any Deficiencies and deducting any Overplus, so that upon the whole the Quantities expected to be received in the two years will be agreeable to this Estimate —

Surplus Tonnage to be filled up in proportions agreeable to the following Quantities, which is what was delivered of those Species from Michaelmas to Xmas 1788

	<i>N^e lbs</i>
Congo	1,462,312
Souchon	387,876
Singlo	1,051,978
Hyson	456,390

There being an Exceeding in Bohea makes it unnecessary to add any of that with the other Species.—

The Singlo Tea to be assorted in the following proportions—

2/12^{ths} Hyson Skins
 5/12^{ths} Twankay
 5/12^{ths} Singlo

2. The great increase in the Consumption of Congo, Souchon, & Hyson Teas, and the decrease in Bohea, makes it necessary that the strictest Attention should be paid to procure the Quantities of each Species as ordered, and that the early Ships should be laden wholly with those sorts.

3. There is scarce any doubt but the Consumption of the three Sorts above mentioned will continue to encrease provided the Market can be supplied with a sufficient Quantity and of good Qualities.

4. The Purchase of Souchon in lieu of Congo in cases similar to that mentioned in the Letter by the K. George dated 18 Jan^y 88. Par. 3. may prove beneficial.

The above is all the extracts I have been able to obtain in Canton . . .

THO^s RANDALL¹

¹ Notation added by Mr. Randall to original manuscripts.

(53)

List of Ships of the British East India Company and other English and Foreign Ships arriving at and leaving Canton, transmitted to HAMILTON by THOMAS RANDALL.

CANTON 1789

LIST OF SHIPS BELONGING TO THE ENGLISH EAST
INDIA COMPANY¹

Cop- per ² d	Ships Names	Commanders	Whampoa	
			Arrived	Sailed
C	Ganges	Joseph Garnault	Aug ^t 25 th	Dec ^r 12 th
C	Middlesex	John Rogers	" 25	" 12
	Earl of Mansfield	Brodie Hepworth	" 25	" 12
C	King George	John Shewood ²	" 30	" 14
C	Lascelles	R. A. Farington	" 30	" 14
C	Valentine	John Lewis	Septem ^r 18	" 14
C	Nottingham	Arch ^d Anderson	" 18	" 31
C	Lord Macartney ³	James Hay	" 20	" 31
C	Sulivan	Robert Pouncy	" 21	" 31
C	Rockingham	J. A. Blanshard	" 22	" 31
C	Earl of Wycombe	John W ^m Wood	" 23	" 31
C	Walpole	Henry Churchill	" 24	
C	Europa	Aug ^s Joseph Applegathe ⁴	" 26	
C	Thetis	Justinian Nutt	" 26	
C	Ocean	James Tod	" 27	
C	General Elliot	Robert Drummond	" 27	
C	Warley	Henry Wilson	" 27	
	Fort William	George Simson	Octo. 11	
C	Duke of Buccleugh	Thomas Wall	" 14	
	Britannia	Edward Cumming	Nov ^r 28	
C	Pitt	Edw ^d Manning	" 29	

21 Ships 18 sheathed with Copper

3 d^o.....wood⁵

¹ This list of ships belonging to the English East India Company is identical with that published for 1789 by H. B. Morse in his book "*The East India Company Trading to China*", Appendix to vol. II.

² This name is "Sherwood" according to the *Register of Ships of East India Company*, 1760-1810, (compiled by Charles Hardy) London 1811, p. 130-35.

³ The Lord Macartney appears in the *Register of Ships of East India Company*, 1760-1810, p. 126, among the ships which sailed for "Coast and Bay" in the previous season April 4, 1788. She moored in England May 24, 1790.

⁴ This name is "Applegath" according to the *Register* just cited. p. 131.

⁵ Notation added by Mr. Randall.

LIST OF ENGLISH COUNTRY SHIPS¹

Cop- per'd	Ships Names	Commanders	From what Port	Where bound to	Whampoa	
					arrived	Sailed
	Soliman Shaw	Joseph McIntosh	Bombay	Bombay	June 8	Nov. 27
	Ganjavar	Will ^m Robinson	d ^o	d ^o	" 25	Dec ^r 23
C	New Triumph	George Smith	d ^o	d ^o	" 30	Nov 25
C	Milford	W ^m Henderson	d ^o	d ^o	July 1	Dec ^r 2
CC	Shaw Addresser	Rich ^d Ramsay	d ^o	d ^o	" 23	" 20
	Victoria-Snow	David Jordan	d ^o	d ^o	" 24	Nov ^r 29
C	Boddam	Jn ^o Anson Smith	d ^o	d ^o	" 25	Dec ^r 20
C	Royal Charlotte	William Watson	d ^o	d ^o	" 25	" 20
C	Sultan	James Callander	d ^o	Surat	Augt 5	Nov ^r 29
	Sullimanny Grab	William Stewart	d ^o	Bombay	" 5	Dec ^r 2
C	Cartier	James Nash	d ^o	d ^o	" 29	Nov ^r 29
C	Yarmouth	Thomas Bruce	d ^o	Madraſs & Bbay	" 29	Dec ^r 9
C	Cornwallis-Snow	David Cuming	Bengal & M. Coast	Bengal	" 30	" 20
	Ganjavar	James Jamison	Bombay	Bombay	Sept ^r 1	" 20
	General Meadows	Rob ^t Billamore	d ^o	d ^o	" 1	" 12
	Hornby	Ch ^s C. McIntosh	d ^o	d ^o	" 5	
	Carnatic	Fra ^s Simpson	d ^o	d ^o	" 18	
C	Britannia-Snow	Tho ^s Hardie	d ^o	Bengl ⁱ & Bombay	" 23	Dec ^r 2
C	Shaw Biram	Tho ^s Meek	d ^o	Bombay	" 26	" 22
C	Indus	W ^m Dickson	Bombay & Madras	d ^o	" 26	
C	Cheerful	John Elmore	Bengal & M. Coast	.....	" 26	Dec ^r 11
C	Hindoſtan	Fra ^s Edwards	Bombay	Bombay	" 27	
C	Warren Haſtings	Nich ^s Cheminant	Bengal & Batavia	Bengal	" 27	Dec ^r 20
	Resolution	James Watson	Bombay	d ^o	" 29	" 22
	Darius	W ^m Maughan	d ^o	Bombay	" 29	
	Fier Reſſool Muckry	G. M. Nelson	d ^o	Surat	Octo 1	
	Surat Caſtle	Henry Lourie	d ^o	Bombay	" 2	
	Fier Allum	John Swane	d ^o	Surat	" 2	
	Thantun Taz Bux	William Roy	d ^o	Bombay	" 6	
C	Enterprize	Paul Shoecraft	d ^o	d ^o	" 6	
	Henry	Geo. Gallaway	Madras	d ^o	" 7	
	Nancy	Cha ^s E. Macklew	Bombay	d ^o	" 9	
	Hibernia	W ^m Jolly	d ^o	Pegu & Bengal	" 10	Dec ^r 22
C	Nonsuch	John Canning	Bengal & M. Coast	Bengal	" 13	
	Clive	Jn ^o Robertson	Bombay	Bombay	" 14	
	Bombay	James Wilson	d ^o	.....	" 17	
	Prince of Wales	James Wilcox	d ^o	d ^o	" 19	Dec ^r 20

¹ Neither H. B. Morse, *op. cit.*, nor the *Register of the East India Company* gives a list of country ships trading to Canton.

(1789) LIST OF FOREIGN SHIPS

Ships Names	Commanders	Nation	Whampoa	
			Arrived	Sailed
Meerwyk	Muller	Dutch	Aug ^t 3 ^d	Decr 28 th
Delft	Swetman	d ^o	Sep ^r 4	" 28
Christoffel Columbus	Pieterston	d ^o	Octo 7	" 28
Schagen	Stockbroo	d ^o	" 16	
Maria Comelia	Modderman	d ^o	" 26	
Dauphin	Duval Javereuil	French	Sep ^r 27	
King of Denmark	Torslow	Danish	Octo 6	
Anthony—Brig	Rich ^d Pooler	American	July 26	
Sampson	Sam ^l Howell	d ^o	" 31	
Massachusetts ¹	Ben Carpenter	d ^o	Aug ^t 28	
Astrea	Ja ^s Magee	d ^o	Sep ^r 18	
Union	John Ashmead	d ^o	" 18	
W ^m & Henry—Brig	Ben Hodges	d ^o	Octo 5	
Three Sisters d ^o	Ben. West	d ^o	" 7	
Federalist	Rich ^d Dale	d ^o	" 7	Decr 23
Atlantic	Henry Elkins	d ^o	" 7	" 20
Light Horse	Ichabod Nicholls	d ^o	" 7	
America	Jacob Sarly	d ^o	" 10	
Jay	Thomas Randall	d ^o	" 16	
Washington	Mark Haskett	d ^o	" 16	
Moise	Oriolle	d ^o	" 16	
Columbia	Robert Gray	d ^o	Nov ^r 18	
Schooner Grace	Cap ^t Millar	d ^o	Dec ^r —	

LIST OF SHIPS AT MACAO

Ships Names	Commanders	Nation	From what Port	Where bound	Arrived	Sailed
Bom Jesus d'Alem	Josa dias de Souza	Portuguese	Lisbon	Lisbon	Aug ^t 9	
Marquise de Angeya	Co ^{sta} de Arevedo	d ^o	d ^o & Brazil	d ^o	Sep. 12	
Campelos	Anto. de Araiyo	d ^o	d ^o & Bombay	d ^o	" 14	
Supply. Brig	W ^m Gillfilling	English	Pinang	.....	1788	
Surprize	Jn ^o Phillips	d ^o	Bengal & Malay Coast	.....	Octo. 6	
					1789	
					Octo. 29	

N.B. The Atlantic was sold at public outcry for 6600 dollars to a persee who has consigned her to Bombay commanded by Newton.

¹ See the reference to the "Massachusetts" in William Barton's article, reproduced above, p. 116.

(54)

Notes on the China trade: no signature.

These Notes on the China trade were probably written by Thomas Randall, as the references in the latter paragraphs to the amount of British and American shipping and to the "English instructions" suggest. If such be the case, the date of this fragment should probably be 1791, that of Randall's lengthy letter published above (pp. 129). That this date is correct is rendered more probable by the fact that the notations "China Trade" and "1789" were added in pencil to the original document in another hand.

[In pencil] CHINA TRADE 1789

[numbered in ink] p. 12 The account of the Chinese trade is in many respects similar to information and conformable to experience I have had— I do not observe any thing contrary to what I have heard from authority— The am^t of the East India trade is minute so far as it goes, and gives some useful information— The increase of the consumption of the finer kinds of Teas deserves notice— The quantity of Specie (at 2 to 3 Millions of Dollars) sent from England is very small considering their Trade. 17,000 Tons, even as we load our Vessels, would require 7½ Millions of dollars, and the English take little Bohea Tea, & much raw silk and wrought silks— musk, drugs, &c^a— which are valuable— The first cost of their China imports must be 9 or 10 Millions of Dollars— Their exports in European goods to China are not great.— Bills must form a great part of their remittances, which bills arise out of the proceeds of the cotton and other articles taken thither by the Country Ships— The cotton Voyage deserves the Attention of our Merchants —

The subject of Ginseng, as usual is not sufficiently explained. None of our Gentⁿ appear to understand the various uses to which it is applied, nor the extent of the consumption— I am satisfied an inspection of this article to take place early would be very useful. It ought not to be by a state law as it would only deprive of the trade that port which should be within the enacting State.

The idea of a representation, concerning the frauds and impositions of the Chinese, to the emperor would deserve attention, were there not danger of its making things worse.

Could it be general, it would be best, as no one Nation would be able to avail itself of the offence which might be given by the Measure.

The respectable proportion of the American Tonnage compared with any foreign nation, but the British is striking—It was equally so the following year as will appear by a paper in my hands—

If the papers are to be ret^d, some of them should be copied first—particularly the English instructions

PART III

Letters relating chiefly
to the
Trade with the West Indies

Trade with the West Indies

(55)

WILLIAM CONSTABLE to GOUVERNEUR MORRIS, *on imports as a basis for revenue: spirits, rum, tea, coffee, &c.*—

William Constable was a prosperous New York merchant, a friend of Hamilton, and an associate of Hamilton in his cotton-manufacturing enterprise at Trenton, New Jersey—the S U M.—while Gouverneur Morris was assistant superintendent of finance under the Confederation, member of the Federal Convention, and already one of the conspicuous figures of this period.

NEW YORK 6th Decem^r 1788

My Dear Friend

When you were here I mentioned to you that I was well convinced the Estimates of Congress, on certain Specified Articles enumerated in their Resolves of April 1783¹—should be Augmented at least One Half,—Agreeable to your request I have since arranged the materials which I had collected from our several Correspondents & other sources, and on taking a nearer view of the subject I can now declare confidently from the very best Evidence that they should at least be doubled, & in some instances trebled.

The Committee of Congress who made the report remarkd that the exactitude of the Computation is of little consequence and observed that they had no precise data to go up; they estimate the Importation into this Continent 3½ mins Strg—My Lord Sheffield Admits that our Imports from G:B: in 1774 were Four Millions Sterling² and He is by no means

¹ Journal of Congress from 1774 to 1788, vol. IV, p. 201 (April 29, 1783).

² The reference here is to Lord Sheffield's *Observations on the Commerce of the American States*. There is apparently some confusion as to these figures, as in Appendix, Table IV, Lord Sheffield gives the following data upon the exports of Great Britain to that part of America, now the United States.

1770	1,925,575
1771	4,202,475
1772	3,012,638
1773	1,979,416
1774	2,590,440

disposed to increase their Amount or our Consequence, but from 1774 to the present period, notwithstanding the War our population must greatly have increased and of course have the Consumption of Dutiable Articles *be greatly* augmented

The Committee state in their Report¹ the following quantities

2,000,000	Gallons Rum	at	3 ^d
100,000	Madira		12
600,000	other Wines		6
300,000	lb Bohea Tea		6
25,000	other Teas		24
75,000 ^c	Sugar		56
2,000,000	Gns Mollasses		1

These quantities I hold Shoud at least be doubled, & I found my Estimate upon the Custom House returns of Pensylvania & other States, and upon my own knowledge of the Importations for 4 Years past into New York— I will pledge myself that it will be found upon examination the quantities which I have sett down are not Exaggerated —

Estimate of the Annual Importations into the United States

Spirits	— A —	4,000,000	Gallons	
Wine	— B —	1,000,000	“	Molasses—F—3,000,000
Bohea Tea	C —	1,000,000	lb	Gallons
Hyson	“ D	125,000	“	
Sugar	— E	20,000,000	—	
Coffee &	“	1,500,000		
Cocoa				

NOTES

		<i>Gallons</i>
A—	The Importation of Spirits into Pensyl-	
	vania in 1784 was	1,074,533
	into New York	1,200,000
	and the Average Annual Importation for	
	the last 3 Years up to Jany 1788 exceeds	1,000,000
	into the Port of New York	

¹Journal of Congress from 1774 to 1788, vol. IV, p. 201 (April 29, 1783).

- B— The Importation of Pensylvania in 1784
was
New York 293,561
the Average for 3 Years is 256,000 Gns— 291,408
- C— The Importation into Pensylvania in 1794
was
New York 341,344
the Importation of Teas for 3 Years into 405,640
this City has Amounted to upwards of 1,300,000
- E— Sugar into Pensylvania in 1784 8,209,964
this Article paid Duty in this State Ad
Valorem on the Cost so that no Account
has been kept of the quantity Entered—
but from a mem^o which I have kept I rate
our Annual Consumption here at upwards
of 4,000,000 lb.—
Ireland consumes 18,000,000 d^o
- E— Pensylvania imported of this Article in
1784 704,592
Cocoa was free at New York, I shoud
Suppose it might Amount to the Same
Quantity as the Coffee which was in 1784 220,000
and this from the returns of three Years is
nearly the Average Annual Quantity—
Gns
- F— The quantity imported into Pensylvania
in 1784 was 564,394
this Article has been imported free into
New York, but from 3 Months Impor-
tation of which I have kept a mem^o of,
Amounting to upwards of 300,000
I am assured that our Annual Importation
is not less than 1,000,000

The Consumption of this Article is very great Owing to the
General Use of it in Diet in Connecticut & the numerous
Distilleries in this State

I woud propose to Add to the Foregoing Articles Salt—of the which the Quantity imported cannot be less than 1 Million of Bushels p Annum—as We cannot estimate the Consumption lower than 20 lbs per Head

M. Neckar¹ I think supposes the Average Consumption in France at 12½—the Cost being 25" p Bushel—I shoud therefore Suppose that with our Cattle & Salted provisions &c^a We cannot possibly Consume less than 20^{lb} p Head

I estimate the quantity of Tonnage necessary for the carrying off the productions of the United States at 500,000 Tons of Shipping—of which—

300,000 are Native

140,000 British

60,000 Foreigners of all Nations

[Endorsed]

Copy

W^m Constable No. 5 To Gouv^r Morris—

Imports of America

Dec^r 5th 1788

(56)

Letter of GEORGE CABOT to HAMILTON (?), on trade in fish with the French West Indies.

George Cabot is the merchant, manufacturer and politician referred to above, pp. 168. This letter is also to be found in Lodge's *Life and Letters of George Cabot*, pp. 46-48, where the addressee is given as Hamilton.

10^{ber} 8th 91—

Dear Sir

I have understood that after the peace of 63 & 'till the late war France gave direct assistance to her Cod fishery besides the monopoly of her home & colonial markets—but notwithstanding these encouragements the supply from her own fishery was so scanty that her prohibitory laws were evaded & very large supplies of foreign fish were continually smuggled into her Colonies & consumed there at prices 40 per Cent higher to

¹ Jacques Necker, Minister of Finance under Louis XVI, from 1776 to 1781.

the Planters than English & American fish was worth at the free ports in the neighbouring Islands—

Since the peace of 83 fish of the U S has not been wholly prohibited but its admission has been generally confined to a single port in an Island (sometimes very distant from the Consumers)—the duty demandable on each quintal¹ has been from 2½ to 3, while the french fish has enjoyed a free access to every place & upon landing has entituled to a very liberal bounty.—

Yet under all these disadvantages the fishery of the U S has successfully rivalled that of France—

These facts at first view seem to indicate such a preponderance of natural advantages in the U S for carrying on the fishery as can hardly be balanced by France but it shou'd be noticed that about 5 years ago the french West Indies markets were surcharged to such a degree that the Exporters of fish from the U S suffered great losses upon all they shipped thither, & the fishery exhibited such symptoms of decline in consequence of it that it may be doubted whether it could possibly have been supported if that of France had not been interrupted by the Commotions at home, it shou'd be observed too that the equipment of armed fleets & appearances of war occur so frequently to the European nations & especially to France that no fair experiment can be tried to determine the extent to which their fishery wou'd be carried in a long period of uninterrupted pursuit—these & similar events however have great influence upon the fishery of the U S—but their frequency & effect in future can neither be foreseen nor accurately estimated, Thence it is the more difficult to say “what is the greatest disparity of duties the fish of the U S cou'd bear & meet the fish of France in the french market?” but on the whole “shou'd the Gov^t of the U S restore to their Cod fisheries in some direct form the full amount which they pay to its treasury by the consumption of dutied articles, & shou'd the fisheries of France be left without aid from their Gov^t except like those of the U S a bare indemnity from contribution to the public revenue, & shou'd the markets of the french West Indies be open to the fish of both Countries, I think it may be safely relied on that the fish of the U S cou'd be afforded full 10 per

¹ A quintal equals 10 pounds avoirdupois.

Cent cheaper than that of France & consequently cou'd bear a duty of 10 per Cent on its value at the place & time of sale & yet sustain the competition with french fish selling in the same market duty free"—

I have thus my dear Sir given you the best opinion I can form at present on the subject of your enquiry—this I have done not with the expectation of adding to your information but solely to shew my readiness to obey your commands & to convince you of the esteem & respect with which

I am very sincerely your assured Friend

& mo. ob. Servt

GEORGE CABOT

[Endorsed]

8 & 18 Dec^r 1791

George Cabot on the
whale fishery¹

(57)

Remarks by GEORGE CABOT, on the Commercial Regulations of Great Britain and France affecting the United States, especially relative to the West Indian Trade.

This document appears in the published works of Hamilton (John C. Hamilton, editor, vol. V, pp. 486-490) as a letter from Cabot to Hamilton. Though the two are identical except occasionally as to paragraphing, this one, found in the Hamilton Papers, is reprinted here for the convenience of students.

Dec^r 18.91—

It is well stated by a Gentleman who has examined the subject that in 1784 the British Gov^t having taken measures for drawing over to their service the whale-fishermen of the U S, the Gov^t of France at once saw the danger of suffering her great maritime Rivel to acquire the advantage of 4 or 5000 excellent Seamen & with them an Art of immense value in marine consideration (as the Nursery of Sailors) which they possessed almost exclusively—France therefore did not hesitate

¹ This indorsement apparently refers not only to this letter but also to the "Remarks" reproduced immediately below: cf. dates, October 8th and December 18th.

to arrest these proceedings by giving *informal* but strong assurances that if the Whalefishermen wou'd, but for a moment, resist the temptations held out by the English, their friends in France wou'd soon procure for them advantages superior to those they were required to refuse—accordingly liberal bounties in money accompanied with other allurements were offered to those Persons who wou'd remove from the U S to Dunkirk & from thence carry on the whale fishery—

this measure at first did not have all the effect expected from it, & rather than hazard the emigration of the Fishermen to the dominion of Britain it was thought expedient to create in France a market for the produce of the whalefishery of the U S—this has been of much benefit to us, but partly from the fluctuating policy of France towards us & partly from the excessive premiums she gives to her own Vessels, it is to be feared that her whalefishery will be eventually established on the ruins of ours—already this business has extended itself considerably at Dunkirk, & the enormous profits which have been made by the aid of public bounties cannot fail to draw from the U S many more Adventurers—

France is undoubtedly an important market for Tobacco Rice Lumber Oil & *occasionally* for some other articles but the Ordinance of the Nat^l Assembly requiring that after Oct^r 91 Tobacco in Amⁿ Ships shoud pay $6\frac{1}{4}$ livres per quintal duty more than in french Ships (equal to near double freight) & determining also that after that period Amn built Vessels can not be sold to the Citizens of France, must render our trade to that Country in our own bottoms comparatively small.—

In the course of the late war¹ France opened the ports of her Colonies to foreign Ships—these very soon engrossed a large share of their trade, & soon after the peace an Arrêt of the Council of State was passed restricting the intercourse between those Colonies & Strangers—the precise intent or effect of this first public regulation after the peace is not within my present recollection & I have no authority to which I can recur, but soon after it (in 1784) another Arrêt was published which established in each of the Windward Islands one port & in Hispaniola three ports to which *foreign* vessels might have free access with Fish Lumber Live Stock Rice Indian Corn—salted

¹ The American Revolutionary War.

beef (but not Pork) vegetables of a certain kind, hides Peltry Pitch Tar & Turpentine, but no other commodities—the duty on fish to be 3 livres per quintal & on salted beef 3 livres per barrel, & on all these commodities such local duties as might be imposed in the Islands, besides an established one per cent on the value—

in return & as payment for these commodities Molasses & Rum of the Islands, & *Goods previously imported from France* are the only articles allowed to be brought away.

several years after the 2^d Arrêt a 3^d passed, which raised the duty on salted beef to a dollar per barrel & on fish to a dollar per quintal, & at all times a sum, equal to the duty per quintal imposed on foreign fish, was given as a bounty on each quintal of fish of the french fisheries.—

Altho' some important products of the U S are excluded by the Arrêts or standing laws, yet the pressing wants of the Colonists have occasionally induced a suspension of those laws in relation to particular articles, but so versatile has been the conduct of the french Gov^t in this part of their administration that the People of the U S have sometimes suffered exceedingly, tho' perhaps oftener profited, by their temporary indulgencies—since the commencement of the Revolution in France & partly in consequence of scarcity there, the Colonists have been obliged to take from the U S large supplies of Flour & some other items not usually admitted.—

the importance of the french West indies market for the fish of the U S will appear from observing that nearly one half of the whole fish is consumed there—shou'd this advantage be lost the fishery wou'd be almost if not quite ruined.—

the Molasses received from the french Islands is an excellent payment for what they buy of us, but it may be noted that this article has been raised to its value and consequence as an object of commerce chiefly if not altogether by the People of the U S,—it was not thought to be worth saving by the french Planters until the Anglo Americans became its Purchasers & created a demand for it—at the commencement of the Molasses trade with the french it was bought by the Tierce supposed to measure 60 gallons or by the Hogshead supposed to contain 100, the New England People at that time used to receive upwards of 90 Galons for a tierce & 150 for a H^{hd} so little was

it valued by the Planters that they for a long time submitted to this imposition in the measure

It has been much complained of that at Cape Francois bonds are required before a Vessel is allowed to trade with such Sureties as cannot be had unless the Captain pays an extravagant commission on his whole Cargo to some merchant of the place whether he needs any other aid of such Merchant or not—what share of this abuse or whether any is chargeable to the Gov^t I am unable to say—or whether it extends to the other parts of Hispaniola I am uncertain but I think it does—

I am not able to discuss any essential difference of principle between the French & English Coloniel systems—both aim at a monopoly of their trade—but neither can effect it perfectly without ruining the Colony, each therefore relaxes occasionally in some points, & constantly in others according to the necessity of the case—both nations admit nearly the same commodities except that France takes fish & refuses Flour while England takes flour & refuses fish—

England being more solicitous as well as more able to *carry* the supplies of her colonies than she is to furnish them insists only on being the Carrier—

France being unable to *carry* the requisite supplies of her Colonies insists only on furnishing them so far as she can, & permits others to supply whatever of prime necessity she cannot supply herself—

The English reserve the exclusive right of carrying the commodities their Colonists need from the U S but they impose no duty on the importation of the Commodities themselves—

The french *allow Foreigners* to *carry* certain commodities which their Colonies need but they impose a duty on the most valuable of those commodities, greater than the whole freight or price of carriage is worth—

The french Colonies are I believe more extensive than the English, but if the french had not from necessity taken some things which they legally prohibit, it may be doubted whether the exports of the U S to the British West Indies wou'd not equal the exports to the French West Indies—

some unavoidable business & some unavoidable dissipations have prevented me 'till this moment from obeying your commands—upon a review of what I have written 'tis some con-

solution in seeing how unimportant the information is, that you have lost nothing by the delay—

[Endorsed]

Remarks on the Regulations
of G B & France
towards
U S by Mr G C

(58)

*Letter of JEREMIAH WADSWORTH to HAMILTON, transmitting
an account of the American trade with the French West Indies.*

The Hon. Jeremiah Wadsworth, a resident of Hartford, Connecticut, was one of the wealthiest men of his time in that state, and was a personal friend of Hamilton. He had served as commissary-general of the Continental Army, and later (1789-95) as member of the federal House of Representatives.

Dear Sir

Inclosed you have the paper I promised you if you wish for any thing more or any explanation of the inclosed I will wait on you when you please

Your Hum Svt

J WADSWORTH

Dec^r 10 1791

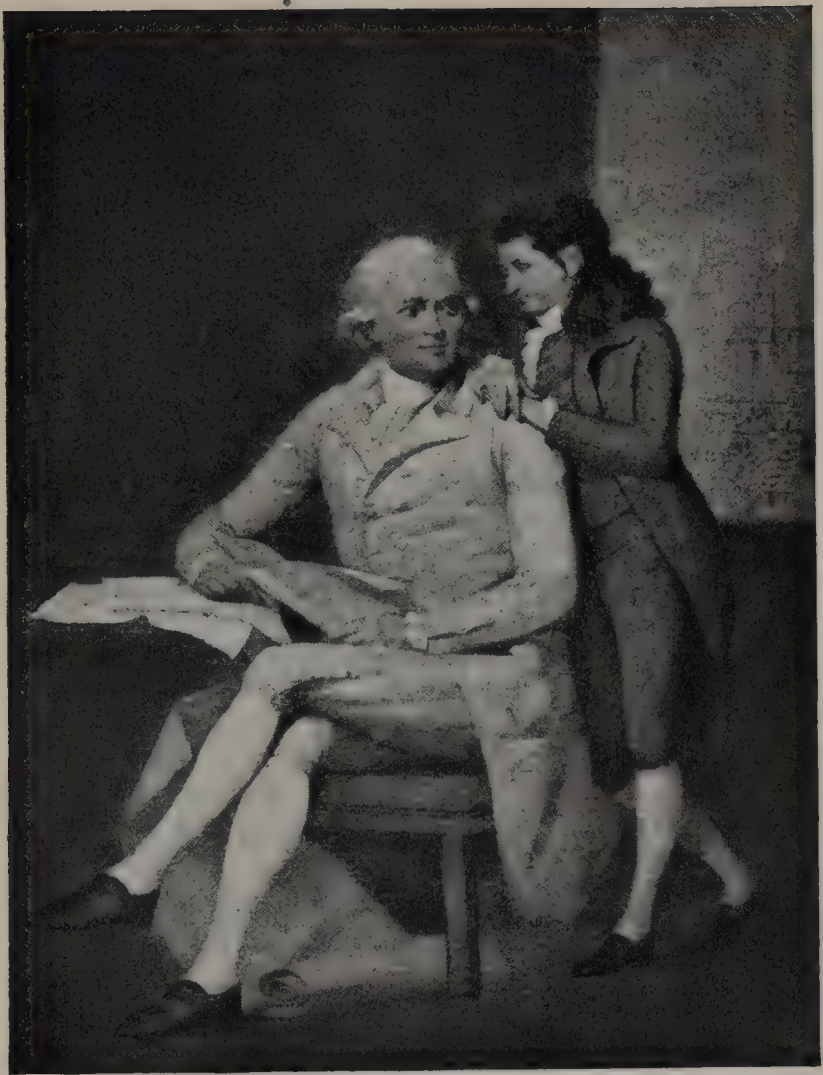
[Addressed]

The Secretary of the Treasury

[Endorsed]

Dec. 10, 1791¹
Remarks of J. W. concerning
French W. I. Trade
Jeremiah Wadsworth¹

¹ The date and name are inserted in a different hand.



JEREMIAH WADSWORTH AND HIS SON
(Based upon a painting by Trumbull.)

[ENCLOSURE]

[in pencil] 10 Dec 1791

Dear Sir

A duty of ten per Cent on our Salted provisions imported into the French Islands would be too much unless we were relieved from other impositions which you will see by the paper herewith are more than ten p Cent on our Cargoes When our Vessels arrive in Hispaniola the Captain must find a Bondsman tho his whole Vessel and Cargo is in the Power of the Government this Bondsman is the Merchant who charges five p C^t on the Sales and the same on the return Cargo—we are happy if he will let our Captains do the business & not meddle in the sales or purchase for in both we are in most instances sure to suffer—in the first from want of knowledge of the Value of our Horses in the latter a carelessness of the quality of the goods—and often short weight & Short measure—sometimes delay of payment we are under the necessity of employing a Captain or Merchant of our own who is paid five per Cent to save us from greater impositions—

Our trade to the French Islands consists of a great Variety of Articles many of which a small duty is charged for Horses Oxen Sheep & Hogs alive Beans Peas Hoops Staves Boards Scantling &c what the legal duties are I do not know but We pay about one per Cent and the duty on Melasses outward is about the same—

It would be of consequence to have the Charges of every kind Mentioned in the treaty¹ as their general regulations are not easily known if it is agreed that we shall pay the same as the French Ships pay they will make us pay all the Charges which are made on their Ships & Men for the purpose of establishing funds for their Vendus—Cases—Beureaus [?] Etc

¹ This reference implies a prospective negotiation between the United States and France concerning our trade with the French West Indies.

a Brigantine of 130 Tons entered
Port au Prince in 1788

Paid—duties on Cargo		
duties 1 p C	344	
on 50 Quintal Salted		
Beef is 3 livres ¹	150	
on Melasses exported		
1 p ^t	712	1206
<hr/>		
Collectors fees 8 dollars	66	
Expedition	66	
Admiralty Anchorage	210	
Harbour Master	60	
Gratification Extra	66	468
<hr/>		
Duties in & out Brot over—		1206
D ^o Port Charges	468	
Commandant	49. 10	
Soldiers	49. 10	
interpreters	99	666
<hr/>		
Sales—40 Horses @ 390 per	14600	[sic]
Beef Lumber Beans Peas &c	5400	
<hr/>		
	20000	
<hr/>		
Commission 5 pC	1000 ²	1000
<hr/>		
	18000	2866
	2866	
<hr/>		
	15134	
Commission 5 pC ^t	700	
<hr/>		
	14434 ³	

¹ The "livre" was an old French silver coin, worth about 18 $\frac{3}{4}$ cents, now superseded by the franc.

² This 1,000 is written over an original 2,000.

³ The arithmetic of this computation is strange and wonderful in various details. However, it is here reproduced as it appears in the original text.

Thus a Cargo of 20-000 livres is reduced to 14434 livres without any Commission to our own Merchants or Captⁿ in many instances the French Merchant takes 10 p Cent at once out of the Groce Sales—the Melases rising in price they latterly put water into it on an average the Melasses falls short in Gauge 5 p Ct our trade has so encreased to the French Islands that American produce gradually falls & that of the Islands has rapidly increased we do not now get more Gallons of Melasses or pounds sugar &c for £1000 than we used to get in 1786. 7. & 8 for £750—I do not mean since the insurrection—but before.

the Practise of Extorting a Commission under Pretence of Being Bondsman is confined to Hispaniola the Windward Islands do not practise so—but all the Other impositions are nearly the Same— Many Vessels of the Burthen of 130 Tons Carry lumber only which does not amount to the Sum Stated above—the Charges are the Same except the duties thus if a Cargo of Lumber in such a Vessel sells for 10.000 livr

Port Charges would be	666
leaving	9334 livre
from which a Commis ⁿ of 5 pC ^t in the groce Sales	500
	8834
from which 5 pC more as Comm ⁿ	434
	8400

which is 16 p Ct in port Charges,
& Comms^{ns} without any duties which is at least one p Ct

(59)

WILLIAM CONSTABLE to HAMILTON, *on imports of tea, wines, &c.*
Commercial information probably for a Revenue System¹

TUESDAY 20th Oct^r 1789

My Dear Friend

I shall answer your letter with strict accuracy as soon as I am able, which will be next week at furthest; but I have been

¹ Pencil note on original letter.

confined to my room for a Week past almost, so that I have all that leeway to bring up—if You are in immediate want of the required information the following may be taken as data—

Wines Cost & Chgs delivered at N.Yk exclusive of Import				
Madeira p Gn of London particular quality new abt				9/6
D°	New york	D°	d°	7/4
Teneriffe	D°	D°	d°	3/9
Xeres or sherry		D°	d°	6/ to 7/
Lisbon		D°	d°	5/6

when I affix prices I mean the Goods to be actually paid for at the time of purchase, and add freight Ins^{ce} & Comⁿ The price of Brandies fluctuates exceedingly according to the Vintage & demand —

The Brandy of Cette & Barcel^o can be imported upon an Average at 3/ Cury. p Gn. free of Duty— The Brandies of France at nearly 4/ at present they can not be bought under 4/8 —

Melasses from the French Islands with the Duty paid in the French Colonies, leakage, Com'n Fre't & Insurance free of our Impost stands the Importer 1/9 Cury p Gn —

Raw Sugars are of such various qualities that they Cost from 48/ to 64/ this Year. but you observe the Crops in the Neutral Islands have totally failed —

Teas —

Bohea in China Costs	14 ^d [per pound]
freight at 30£ Cury p Ton equal	7 ^d — this means a Ton
Measurem ^t	
Insurance & Comn 10 p%	1 1/2
Interest say 7	1

23 1/2^d p lb.

Every pound of Bohea Tea Costs the Owner & Importer from China at least 2/ Cury— It may be purchased of the Dutch & Danish C^{os} at about this price or rather under¹

Souchong according to quality costs from 3/ to 5/ to which add the Charges and it stands from 5/ to 7/ —

¹ Reference here is probably to the Danish and Dutch East India Companies, which competed with the English Company for the trade of the Orient.

Hyson Tea costs from 4/8 to 5/6 & with Chgs 6/ to 8/ —
 Coffee with the Expenses imported from the Cape costs 1/4^d
 Cocoa do do do 8^d

Manufactured Tobacco I know nothing about —

Yrs

W^m CONSTABLE

Under the Head Distilled Spirits I shou'd have taken notice
 of Rum

from Jamaica with Casks Com'n &^{ca} average p Gn. 3/8
 Windward Islands ————— 3/

I mean in the Course of a few Days to send you a pro forma
 Invoice of each Article delivered at Newyork and am at all
 times happy to have any opportunity of obliging You

W^m CONSTABLE

(60)

WILLIAM CONSTABLE to HAMILTON, on prices of Bordeaux
 Claret.

Financial material for a tariff.¹

probably 1790¹

Dear Sir,

Clarett imported in Bottles stands from 3/ to 5/ p Bottle
 as in quality—annexed you have Inv^o 16 Hhds of French
 Wines from Bordeaux

		fr
4 Hhds	Palus Wines (Clarett) Vintage 1786	210
2 —	Margaux “ 1785	300
2 —	Cantenac “ “	275
2 —	Medoc “	250
2 —	White Barsac	200
2 —	“ Lonpiac	135
2 —	“ Langa	105
		<hr/>
		1475

¹ Notations entered in different hand at head of letter.

Chgs

Duty at 54 c^t [centimes?] p Ton of 4 Hhds 20.16

Iron Hoops 64 ditto Cooperage &

shipping 48

112.

132.16

Cost at Bordeaux

1607.16

with Chgs Com'n freight & Insurance from 3/ to 5/ p Gn

Y^r mo humb Serv^tW^m CONSTABLE

I never imported either Burgundy or Champaign

[Addressed]

The Hon^{ble}

A. Hamilton, Esq.

[Endorsed]

Wm. Constable

without date

Merchandise

PART IV

Letters relating to the
Society for establishing
Useful Manufactures

Society for establishing Useful Manufactures

(61)

*Letter to "MANAGER OR PARTNERS OF COMPANY FOR WEAVING
COTTON CLOTH LATE GOT UP OR ERECTED IN PHILADELPHIA",
from a "HOSIER" in Glasgow.*

Expressions in this letter respecting the willingness of English hosiers to emigrate to the United States may perhaps be related to what Hamilton has to say on the general subject of the emigration of artisans to this country: see Report on Manufactures, e. g., pp. 259-260, below. See also Letter of Samuel Paterson reproduced above, pp. 109-112.

GLASGOW 6 July 1790

Gentⁿ

I have herewith Sent you samples of the different Cottons, Used for Gloves, Stockings & Mitts in Britain they are all spun upon the Water Mill—I have also Sent you a New Book lately published in Scotland upon Bleaching¹—

It would be an Act of Humanity to the poor Hosiers in Britain— If Congress or private Societys would grant a Bounty upon all Hosiers imported from This Country youll get plenty by that Means—otherways No Man in that Branch will be able to Come Over to America—As it is utterly impossible for the Poor Stocking Weaver to raise as much as pay his freight & none dare indent him—for their is a penalty of £1700 st & 12 Months imprisonment, for every such Act. This Country is queit overstocked with Hosiers— & of Course their Wages very low—were 1000 or 2000 to be imported into America their would be plenty left in this Country; when it would serve America it would only raise the Wages of those left in Britain to a proper Levell, with the price of Provisions. And you will by this receive the Blessing of the Poor in Britain & of every

HOSIER

¹ The samples and book here mentioned are not to be found in the Hamilton Papers at Washington.

P. S. Spun Cotton yarn Could be imported from, Britain I believe— If not their is plenty Spun by Water Mills in Ireland & France—from which Countrys it Could be gott —

Their is also a New Invention in Spinning Jeanies, discovered, Called the Mule Jeanie. upon which Twist Cotton it is said Can be Spun by the [torn] Hand, as good as that Spun by [torn] the Water Mills

A HOSIER

O Remember the Poor, Hard Wrought half Starved Workmen in Britain

[Addressed] To the Manager or Partners of a
Company for Weaving Cotton Cloth
late got up or Erected in Philadelphia

[Endorsed] Glasgow 6 July 1790
Anonymous

(62)

Application of THOMAS MARSHALL to HAMILTON for employment in erecting a cotton manufactory on Arkwright principles.

Thomas Marshall, the author of this letter, was subsequently (December, 1791) made superintendent of the cotton mill erected by the Society for establishing Useful Manufacture, or the S. U. M., as it was called; and he remained with the company until January, 1796 (Davis, *op. cit.*, vol. I, pp. 399, 496).

July 19th 1791

Sir/

Having for a Considerable time entertained an Opinion that proper Encouragement wou'd be given in this Country, to the Cotton Spinning Manufactory if constructed upon the Genuine Principles of Sir Richard Arkwright the Inventor and Patenter of the Machinery; I form'd the resolution of Visiting America but previous to my departure from England, I was Introduced by a friend, to Mr. H. Crugar of this Town and in April last to Col: Smith, and by the Advice of the latter Gentleman, I took my departure for New York where I arrived on Tuesday last the 12th Inst. and in Consequence of the

Interviews I have been favour'd with from Mr Duer, Mr. Crugar and Mr Sands on the Business, I have respectfully taken the Liberty of addressing you on the Subject.

The Laws of England being very severe against the Emigration of Mechanic's, I am deprived of every Testimony or Document of my Capability in the Manufactory, which if I had fortunately possess'd wou'd in all probability have recommended me to your particular Notice, and I flatter myself Sir, you'll join me in Opinion, that no branch is so difficult to be Explain'd or Elucidated by Words, as Mechanism, as I am thus debar'd of every Exterior recommendation, I have only to solicit your perusal of the following Narrative of facts, which if my Oath wou'd enforce, I shou'd be exceeding happy in giving the proof.

Were I weak enough to be vain of any Occurrence in Life, that of my Immediate Tuition under Sir Rich^d Arkwright wou'd make me so, a Man whom *all* attempt to Imitate in the Business but few or none can Equal: I enter'd into this Gentlemans employ in 1786, and thus derived my knowledge of the Manufactory upon his principles and that his method claims a very decided Superiority over every other Competitor needs no Comment. I Superintended the very last work Sir Richard Erected, at Marsden, Opposite Matlock Bath, Derbyshire, and so late as November last I was all over his Works, and am Consequently fully Acquainted with every modern Improvement, some of which are of material Consequence, I last Winter Erected the Cotton Mill in all its branches for a Mr Callaway of Canterbury, Kent— this Gentleman was the Inventor of the Muslins that bear the Name of the above Town, and which there is such a rappid demand for now all over England, the foreman of his Weaving business I am in treaty with and only waits my Letter for to join me, so that the whole Business of Carding Drawing, Roving, Spinning, Bleaching, and Weaving, can be conducted under one firm, and this, Sir, I pledge myself equal to, and Capable of, and shou'd I be fortunate enough to be honor'd with your Confidence in the Undertaking, nothing shall be wanting to Establish and Speedily bring to its utmost perfection in its fullest Extent the whole of the above Business, and entertain no doubts but I can quickly Accomplish it, I shou'd prefer a share of the Nett

produce, which I willingly leave to your honor & Determination, and will pay legal Interest for any Sums which on my own Account I may draw during the Mills Completion, or the Undertaking of the Business, but as particulars cannot be stated here, I most respectfully wait your Commands, which shall be immediately attended to by Sir

Your Most Obedient

Humble Servant

T MARSHALL

[Addressed] Alexander Hamilton Esq^r

[Endorsed] Marshall concerning
Manufactures

(63)

WILLIAM HALL to HAMILTON, on mill site and Marshall's machinery.

Hall was later (December, 1791) engaged as superintendent of the cloth-printing shop set up by the S. U. M., and he remained in its employ until the summer of 1793; while the "Mr. Mort", referred to in this letter, was hired by the company "as an assistant in the manufactory in such way as his services may be thought most useful". (Davis, *op. cit.*, vol. I, pp. 399, 493.)

NEW YORK 29th Aug^t 1791

(Ibid).

Sir/

Mr. Mort & myself have examined the Delaware as high as Pequest about 94 miles above Philadelphia & have found several good situations. On the Raritan there are none. Our Money runing short oblig'd me to come to New York for a supply. We propose going up the Pasaic in a few Days, after which you shall receive a report of our observations.

I call'd on M^r Marshall and deliver'd your Letter He answerd very freely every question I put to him— He seems to understand the theory of the Business but I am very doubtful if He is much acquainted with the practice— The modells He is making will not work & I much fear some money will

be expended and delays ensue on that acct M^r Mort I expect will be in Philadelphia in 6 or 8 Days to Him I beg leave to refer you for particulars He was present during the conversation but did not see the Modells— M^r Marshall might have made the Modells to have worked much easier than larger Machines

I have the honor to be

Sir

Your most obed^t Serv^t

WILLIAM HALL

N^o 57 Maiden Lane

[Addressed] Alexander Hamilton Esq^r
Secretary of the Treasury
Philadelphia

(64)

Draft of agreement with WILLIAM HALL concerning the cotton manufacture in N. J.

AGREEMENT BETWEEN A H ON BEHALF OF A CERTAIN
SOCIETY OR COMP FOR ESTABLISH MANUFACTURES
IN THE STATE OF N JERSEY & HALL

The said Hall [engages to]¹ shall superintend and carry on for the said Society or Company the business of printing [and] staining and bleaching [of cottons—calicoes] of Cottons and Linnens [all the same] in all its parts, upon the like principles and in the like method, as the same is now carried on in the Kingdom of Great Britain, and to construct or [direct—const] direct the construction of all such machines as are in use in the said Kingdom [concerning] in and about the

¹ The portions of this document here shown in brackets were originally written into the manuscript and later scratched out.

(65)

HENRY GUEST to HAMILTON, on establishing manufactures in Brunswick, N. J.

BRUNS^{wk} EASTER FERRY Aug^t 1791

Sir/

I understand you Have Lately Been Here with Some Other Gentlemen, to Examine A Little into the Conveniency that this Neighborhood Might Afford for The Establishing the public Manufactory— I hope Sir, you Will not take it Amis in An Old Inhabitant—Though not had the Honour to be properly introduced to you, to Give you such information respecting the conveniency as He thinks Himself Adequate to —

Depth of Water—In Common tides 10 feet Within 1 Mile of Brunswick Where a Vessel Lays Afloate at Low Water and With A fair Wind Vessels May be at Sea in A few hours—South River parts from Raraten About 5 Miles from Here Carries 7 feete to near the Brige

Mill Seats/Raraten River—A famous one Just Above the Brige at the Landing Dam now in Good repaer— Mill Burned by the Brittish and to be sold. and As the Raraten has Considerable falls I think a Number of Mills may be Erected Within 10 Miles of this place, that never Will Want Water.—

Mile run Brook—May be raised to Any reasonable hight By A Very Short Dam. A Course has been Opened formerly for the Use of the Copper Mine through the rocks about $\frac{1}{2}$ a Mile from 20 to 50 feet from the Surface of the Ground—This Led the Water to an OverShot Wheel, Which by pumps threw out a Brook of Water in Raraten and Kep^t the Mine Clear—Perhaps on proper investigation You May judge that this Stream May be Used again for the Same purpose. I have seen Sheats of Virgin Copper produced from it from 20 to 50 lb W^t—and it Allso produced A Considerable Quantity of Stamp Oar

Lawrances Brook—This is a Large and fine Stream of Water 2 Miles from here there is at preasent 3 Grist Mills on it

Within 3 Miles of this place And As it has A pritty Good fall, More May be Made. I think one May be Made below M^r Neilsons Mill to Good advantage, Which you have Lately Sean.—

South River—Within A Mile of the head of the Navigation There Meats 2 Large Streams of Water Where there is Lately Erected A Grist and Snuff Mil Stream Capable of Any kind of Works— A Little Distance from this is A paper Mill on one of the Branches that Does A Good Deal of Business More Works May be Erected on the Same Stream.

Main Branch Dela^e River—About 2 Miles from this Landing is A Mill This pond is at preasent Down it formerly Contained Water Enough for A Grist Mill— Saw D^o and forges to Make Barr Iron—2 Miles Above this Was another forge—now all Gone to Decay—all these Within 9 Miles by Land of this place.—

Fewil and timber—There is A Most Noble timber Swamp Begining Within 2 Miles of this place, runs 10 Miles towards Kingston and is from 1 to Near three Miles Wide, Chiefly White Oake—and Between this and Spotswood Chiefly Wood Land and from here up Raraten for 30 Miles is pritty Well Stocked With timber —

Provisions and Vegetabels—Generly Overabounding and at preasent too Cheap as We are in the Middle of this Garden of Columbia and Lay at A propper Distance from the Gormondising Citeys of New York and Philad^a I think it neadless to trouble you With perticuler remarks on this Articles

Air—Perticulerly Healthfull, No Mascitoes—

Water—Wells Easily Made, and of the Best Quality—and Abounding With Springs of Soft Water Propper for Brewereys

These Sir are the Advantages that nature Has thrown in our Lap and Are What I Can recolect at preasent for Your information—If You should think it propper for Me to be More perticuler in Any of them or in Any Other Matt^r Whenever you are pleased to Lay your Commands on Me I shall Gladly serve you to the Utmost of My Abillitys Though I must Assure

you it is With some Reluctance I trouble You With this Without your Leve As I well know your time to the Public is of infinite Use— I am Sir Yours at Command

HENRY GUEST

Hono^{le} Alexander Hamilton
Phila^d

[Endorsed]

Brunswick Aug 1791 from Henry Guest
Information of the country in
relation to the establishing of
manufactories

(66)

PROSPECTUS of the SOCIETY FOR ESTABLISHING USEFUL MANUFACTURES, *undoubtedly drafted by* HAMILTON.

[headed in pencil] (1791?)

The establishment of manufactures in the United States when maturely considered will be found to be of the highest importance to their prosperity. It seems an almost self evident proposition that communities which can most completely supply their own wants are in a state of the highest political perfection. And both Theory and experience conspire to prove that a Nation (unless from a very peculiar coincidence of circumstances) cannot possess much *active* wealth but as the result of extensive manufactures —

While also it is manifest that the interest of the community is deeply concerned in the progress of this species of industry, there is as little room to doubt that the interest of individuals may equally be promoted by the pursuit of it. What is there to hinder the profitable prosecution of manufactures in this Country—when it is notorious, that independent of impositions for the benefit of the revenue and for the encouragement of Domestic enterprise—the natural commercial charges of the greatest part of those which are brought from Europe amount to from fifteen to thirty per Cent.—and when it is equally notorious that provisions and various kinds of raw materials are even

cheaper here than in the Country from which our principal supplies come?

The dearness of labour and the want of Capital are the two great objections to the success of manufactures in the United States.

The first objection ceases to be formidable when it is recollected how prodigiously the proportion of manual labor in a variety of manufactures has been decreased by the late improvements in the construction and application of machines—and when it is also considered to what an extent women and children in the populous parts of the Country may be rendered auxiliary to undertakings of this nature. It is also to be taken into calculation that emigrants may be engaged on reasonable terms in countries where labor is cheap, and brought over to the United States.

The last objection disappears in the eye of those who are aware how much may be done by a proper application of the public Debt— Here is the resource which has been hitherto wanted. And while a direction of it to this object may be made a mean of public prosperity and an instrument of profit to adventurers in the enterprise, it, at the same time affords a prospect of an enhancement of the value of the debt; by giving it a new and additional employment and utility.

It is evident that various fabrics under every supposed disadvantage are in a very promising train. And that the success has not been still more considerable may be traced to very obvious causes.

Scarcely any has been undertaken upon a scale sufficiently extensive or with a due degree of system. To ensure success it is desirable to be able to enter into competition with foreign fabrics in three particulars—quality, price, term of credit. To the first, workmen of equal Skill is an essential ingredient. The means employed have not generally been adequate to the purpose of procuring them from abroad, and those who have been procurable at home have for the most part been of an inferior class. To cheapness of price, a capital equal to the purpose of making all necessary advances and procuring materials on the best terms is an indispensable requisite—and to the giving of credit a Capital capable of affording a surplus beyond what is required for carrying on the business is not

less indispensable. But most undertakings hitherto have been bottomed on very slender resources.

To remedy this defect an association of the Capitals of a number of Individuals is an obvious expedient—and the species of Capital which consists of the public Stock is susceptible of dispositions which will render it adequate to the end. There is good reason to expect that as far as shall be found necessary money on reasonable terms may be procured abroad upon an hypothecation of the Stock. It is presumeable that public Banks would not refuse their aid in the same way to a solid institution of so great public utility. The pecuniary aid even of Government, though not to be counted upon ought not wholly to be despaired of. And when the Stock shall have attained its due value so that no loss will attend the sale all such aids may be dispensed with. The Stock may then be turned into specie without disadvantage whenever specie is called for.

But it is easy to see that upon a good Capital in Stock an effective credit may be raised in various ways which will answer every purpose of specie; independent of the direct expedient of borrowing.¹

To effect the desired association an incorporation of the Adventurers must be contemplated as a mean necessary to their security. This can doubtless be obtained. There is scarcely a state which could be insensible to the advantage of being the scene of such an undertaking. But there are reasons which strongly recommend the State of New Jersey for the purpose. It is thickly populated—provisions are there abundant and cheap. The State having scarcely any external commerce and no waste lands to be peopled can feel the impulse of no *supposed* interest hostile to the advancement of manufactures. Its situation seems to insure a constant friendly disposition.

The great and preliminary desideratum, then, is to form a sufficient Capital. This, it is conceived, ought not to be less than Five hundred thousand Dollars. Towards forming this Capital, subscriptions ought immediately to be set on foot, upon this condition that no subscriber shall be bound to pay until an Act of Incorporation shall have been obtained—for

¹ Upon the use of government debt as capital in manufacturing enterprises, see also Hamilton's Report on Manufactures, pp. 274-279, below.

which application may be made as soon as the sums subscribed shall amount to One hundred thousand dollars.—

As soon as it is evident that a proper Capital can be formed means ought to be taken to procure from Europe skilful workmen, and such machines and implements as cannot be had here in sufficient perfection. To this the existing crisis of the affairs of certain parts of Europe appears to be particularly favourable. It will not be necessary that all the requisite workmen should be brought from thence— One in the nature of a foreman for each branch may in some branches suffice. In others it may be requisite to go further and have one for each subdivision. But numbers of workmen of secondary merit may be found in the United States; and others may be quickly formed.

It is conceived that there would be a moral certainty of success in manufactories of the following Articles.

- 1st Paper and pasteboard
- 2nd Paper Hangings
- 3rd Sail Cloth and other Coarse linen Cloths, such as Sheetings, Shirtings, Diaper, Oznaburgs &c.
- 4th The printing of Cottons and Linens; and as incident to this but on a smaller scale the manufacturing of the Article to be printed.
- 5th Womens shoes of all kinds.
- 6th Thread, Cotton and Worsted Stockings
- 7th Pottery and Earthen Ware
- 8th Chip Hats
- 9th Ribbands and Tapes
- 10th Carpets
- 11th Blankets
- 12th Brass and Iron Wire
- 13th Thread and Fringes¹

It will be unnecessary to enter into the details of the execution further than to observe that the employment of the labor saving mills and machines is particularly contemplated

In addition to the foregoing a brewery for the supply of the manufacturers, as a primary object may be thought of.

¹ A few months later, this scheme had shrunk to "the making and printing of cotton cotton cloth": see Hamilton's Report, p. 311, below.

When application shall be made for an Act of Incorporation it ought to include a request that provision may be made for incorporating the Inhabitants of the district within a certain defined limit which shall be chosen by the Company as the principal seat of their factories and a further request that the Company may have permission to institute a Lottery or Lotteries in each year for the term of five years for a sum or sums not exceeding in one year 100,000 Dollars. The State of Jersey if duly sensible of its interest in the measure will not refuse encouragement of this nature.

An incorporation of this sort will be of great importance to the police of the establishment. It may also be found eligible to vest a part of the funds of the company in the purchase of ground on which to erect necessary buildings &c. A part of this ground divided into town lots may be afterwards a source of profit to the company.

The lottery will answer two purposes. It will give a temporary command of money and the profit arising from it will go towards indemnifying for first unproductive efforts.

The following scheme for the organisation of the company will probably be an eligible one —

1st The Capital of the Company as before remarked to consist of 500,000 dollars to be divided into 5000 shares, each share being 100 dollars.

2nd Any person, copartnership or body politic may subscribe for as many shares as he she or they may think fit. The sums subscribed to be payable One half in the funded 6 p C^t Stock, or in three per Cent stock at two dollars for one, and the other half in deferred stock.¹ The payments to be in four equal parts. The first at the time of incorporation, the second in six months after, the third in six months after the second and the fourth in six months after the third. Those who prefer paying in Specie to be permitted to do so computing the funded six per Centum at par and the deferred according to its present value at the time of payment discounting the

¹ The "stock" here mentioned is unquestionably the funded debt of the United States for which provision had been made in the funding act of 1790—a scheme elaborated by Hamilton himself. According to this act, the debt was evidenced by bonds of three sorts: 6 per cent bonds and 3 per cent bonds which bore interest at once, and 6 per cent bonds upon which interest was "deferred" until after 1800. (Holders of existing government obligations received such bonds in specified proportions.)

interest thereupon during the suspension of the payment at the rate of six per Centum per annum.

3rd The affairs of the Company to be under the management of thirteen directors to be chosen annually on the first Monday of October in each year by plurality of suffrages of the Stockholders. The Directors by plurality of voices to choose from among themselves a Governor and Deputy Governor.

4th The number of votes to which each stockholder shall be entitled shall be in proportion to the number of shares he shall hold that is to say one vote for each share. But neither the United States nor any State which may become a subscriber shall be entitled to more than One hundred Votes. The United States or Any State nevertheless which may subscribe for not less than 100 shares may appoint a Commissioner who shall have a right at all times to inspect the proceedings of the Company and the state of its affairs, but without any authority to controul. Every subscriber may vote by Attorney duly constituted.

5th There shall be a stated meeting of the Directors on every first Monday of January, April, July and October at the place which is the principal seat of the Manufactory. But the Governor for the time being or any three Directors may by writing under his or their hands directed to the other Directors and left at their respective places of abode at least fourteen days prior to the day for meeting, or by advertisement in one public Gazette printed in the State where the Corporation shall be established and in another public Gazette printed in the City of Philadelphia, and in another public Gazette printed in the City of New York, for the space of thirty days prior to the time of meeting convene a special meeting of the Directors for the purpose of transacting business of the Company.

6th No Director shall receive any emolument unless the same shall have been allowed by the Stockholders at a general meeting. But the Directors may appoint such Officers and with such compensations as they shall think fit.

7th Not less than seven Directors, if the Governor or Deputy Governor be not one shall constitute a Board for the transaction of Business. But if the Governor or Deputy Governor be one, Five shall suffice. In case it should at any time

happen that there are two separate meetings of Five or more Directors each, but both less than a majority of the whole, one having the Governor and the other the Deputy Governor, that at which the Governor shall be present, shall be the legal one.

8th The Directors to have power to make all Bye laws, rules and regulations requisite for conducting the affairs of the company.

9th At every annual Meeting of the Stockholders for the purpose of choosing Directors, the Directors shall lay before them a general state of the affairs of the Company exhibiting the amount of its Stock debts and Credits, the different kinds of Manufactures carried on, the number of persons employed in each and their respective compensations together with an account of profit and loss.

10th The persons not exceeding five in number who at any general meeting shall have next after the Directors chosen the highest number of votes for Directors shall by force thereof be a Committee of Inspection and shall have a right of access to all the books of the Company and of examination into all its affairs and shall at each succeeding meeting report all such authentic facts as shall come to their knowledge to the Stockholders for their information. The Stockholders may also if they think fit at any general meeting appoint by plurality of suffrages any five of their number for the purpose of making such enquiries and investigations as they may think necessary.

11th The Stockholders at a general meeting may annul or alter any of the regulations established by the Directors and make such others as they may think necessary.

12th Any Board of Directors or either of the Committees above mentioned may at any time call a general meeting of the Stockholders, giving thirty days previous notice thereof in three Gazettes, One published in the State in which the Factory shall be established, another in the City of Philadelphia and another in the City of New York.

13th Every Cashier or Treasurer of the corporation shall before he enters on the duties of his Office give bond with One or more sureties to the satisfaction of the Directors for the faithful execution of his duty in a sum not less than twenty thousand dollars.

14th So much of the Capital Stock of the Company as may consist of Public Debts shall be placed on the Books of the Treasury of the United States in the name of the Corporation, and every Stockholder shall be entitled to a license under the seal of the corporation to inspect the account of the said stock at his pleasure as far as may comport with the rules of the Treasury. This however shall not prevent the investment of the said debt in stock of the Bank of the United States reserving to each Stockholder the like right of inspection in relation to the Stock of the Company to be invested.

15th There shall be a yearly dividend of the profits of the Company for the first five years, and after that period a half yearly dividend.

16th The Stock of the Corporation shall be assignable and transferrable according to such rules as shall be instituted in that behalf by its laws and Ordinances.

17th The Corporation shall be at liberty to make and vend all such articles as shall not be prohibited by law: Provided that it shall only trade in such Articles as itself shall manufacture in whole or in part or in such as shall be received in payment or exchange therefor.

18th It shall be understood that a Majority of the Stockholders may at any time dissolve the Corporation; but this shall be only done at a General Meeting which shall have been specially summoned for the purpose with public notice of the intent. And upon such dissolution the Directors for the time being shall be *ipso facto* trustees for settling all the affairs of the Corporation disposing of its effects, paying its debts and dividing the surplus among the Stockholders in proportion to their respective interests in the Stock.—

19th The Stock and other property of the Corporation to be exempt from Taxes.—

The management of the affairs of this Company will require that an Agent should be appointed to superintend all the different works and the disposition of the articles manufactured in conformity to the General regulations of the Directors. This Agent ought to have such a compensation as will command the services of a man every way competent and trust worthy. Such a man may doubtless be found— It is not necessary that he should be a technical man in any of the branches of manu-

facture, but a man of information, thoroughly a man of business, of probity and diligence and energy.

(67)

Projected AGREEMENT for binding the Subscribers to the S. U. M. pending incorporation of the Society.

DRAFT OF AGREEMENT FOR INCORPORATION.

We the Subscribers for ourselves respectively and not one for the other and for our respective heirs, executors and administrators do severally covenant promise and agree to and with each other and with the heirs Executors and Administrators of each other that we will respectively contribute and pay in the manner and at the times specified in the plan hereunto annexed the respective sums against our respective names hereunder set for the purpose of establishing a company for carrying on the business of manufactures in one of the States of New York New Jersey and Pennsylvania (giving a preference to New Jersey if an incorporation can be obtained from the said State on advantageous terms) according to the general principles of the plan aforesaid, but subject to such alterations as shall be agreed upon at any time previous to the obtaining an Act of Incorporation either in the principles or details thereof by the major part of us whose names are hereunto subscribed, or in the details thereof only, as shall be thought fit by the major part of ther persons hereinafter named. And we do hereby jointly and severally constitute and appoint our and each of our Attornies who or the major part of them or the major part of the survivors of them are hereby empowered as soon as the sum of One hundred thousand Dollars shall be subscribed hereto to make application on our behalf to either of the States aforesaid (giving such preference as aforesaid to the State of New Jersey) for an Act or Acts of Incorporation according to the principles of the plan aforesaid with such alterations in the details thereof as shall appear to them eligible, or with such alterations whatsoever, as shall be previously agreed upon by us; And further to take such measures at our joint expence as shall appear to them necessary and proper

for engaging workmen, in the several branches of manufacture mentioned in the said plan.

In testimony whereof We have hereunto subscribed and set our hands and seals the day of in the year of our Lord One thousand seven hundred and ninety One.

[Endorsement] A. H.—Fin. Per

Manufactures

Projet for an incorporation.

[in pencil] Perhaps that at Patterson, which dated about 1790. From the indorsement probably Hamilton's¹

(68)

Letter from UNKNOWN AUTHOR to HAMILTON [?], on the plan of the S. U. M.

This letter was probably written in September, 1791, soon after the publication of the Prospectus (cf. document immediately preceding), which occurred about September 5, 1791 (Davis, *op. cit.*, vol. I, p. 357). The authorship of the letter is uncertain. Davis (p. 482) states that it was probably written by Marshall, but neither the handwriting nor substance supports this view.

[in pencil] (1791?)

Sir

I have had the honor to transmit to you a sketch, which you appeared to desire, of the arrangements necessary for the execution of the plan chalked out in your prospectus. I confined myself to class the objects with which you propose to begin the business on each of these heads. I might have entered into more particular details, and given, if not an exact estimation, at least an Idea of the expense of their Establishment, their support, their consumption and produce. I have occupied myself with this business, at least as much as one Could, who has only a general knowledge, but not the exact information which a Workman only can possess.²

¹ Although the name of the Society is not mentioned, unquestionably this draft of proposed agreement relates to the S. U. M. This postscript done in pencil is probably the subsequent note of a collector. The endorsement is in Hamilton's handwriting.

² No letter corresponding to the above-mentioned "sketch" is to be found in the Hamilton papers at Washington.

Now that I see, Sir, the business ready to begin, I will take the liberty of communicating to you my private opinion on the subject; and my reason for not expressing it in the paper I transmitted to you was, that it differed in some degree from the ideas contained in the prospectus. I had at first with you the idea that an Establishment comprehending a dozen different objects well chosen, conducted by an able direction, enlightened and honest managers and skillful workmen might have the greatest success, and I think so still; but would not the union of so many qualities, on which the success entirely depends, be an absolute miracle? and would it be prudent to depend upon it? But if one of them is Wanting, you will find bad goods come out of the hands of unskillful workmen; dishonest managers make a fraudulent advantage at the expense of their employers, which in such a multitude of details will escape the eye of the directors; and directors who for want of particular knowledge of each of the different branches conduct well that with which they are best acquainted, and be continually exposed to be deceived in all the others. The more I think on this affair, the more I am persuaded that there is a great risk in pursuing it in the manner in which it is proposed, and its advantageous execution must depend on fortune, more than on reason. I have seen in Europe individual manufacturers employ two or three hundred hands, but in the same branch, and the undertakers had occasion only to be acquainted with that branch; besides they were employed for their own profit, and not as hirelings, and after all were often cheated in the details. In the establishment proposed we must in the first place [have] as many faithful and enlightened directors as there are different branches; then a number of managers each capable of following the branch intrusted to him with the eye of a real and intelligent manufacturer, without which it will be necessary to depend absolutely on the head-Workmen, who, even if they should be all honest, can never be stimulated by that interest which animates those who work for themselves. The expense of such an establishment is immense in buildings, machines, looms, the purchase of raw-materials of so many kinds, the Wages of workmen, salaries of managers, Directors &c. these articles alone, without counting the purchase of lands and unforeseen expenses, will demand an immense capital if they are calculated

in a reasonable manner, and present in their details a multitude of means of loss to the Corporation. I repeat it, Sir, unless God should send us saints for Workmen and Angels to conduct them, there is the greatest reason to fear for the success of the plan.

I am far from thinking, however, that there are not other means to accomplish the object in your view which, if I understand it right, is 1st to encourage and protect the establishment of the manufactures necessary for this country— 2nd To take advantage of the crisis in which affairs now are in several country [sic] of Europe, to Engage as many manufacturers in as many different Branches as possible to Emigrate to this country. It seems to me that these objects may be equally accomplished by the corporation undertaking three or four of the principal branches, and Which I should Chuse connected together that the Details may be more easy to follow.—3^{dly} by becoming partners in the other branches with undertakers of known abilities and character on the terms that may be thought proper.

A general spinning house, and the employment of its products are in my opinion Worthy of préférence The extent to Which they may be carried is sufficiently great while their connection makes the Business easy to be followed. these two articles require others as accessory, viz. the dying of cotton, Wool &c before they are manufactured. I am perfectly convinced that it would be much more easy to manage well 600 hands in such a manufacture, than 200 divided among different branches which have no dependence on each other.

As to the proposal I make of engaging the corporation as pa[rtners?]¹ with private manufacturers, it is not a new idea. I have seen in France the government concerned in many private undertakings in Which they appointed a commissary to take care of their interests. This was one of the means of encouraging and protecting manufactures. Here it has another advantage, that of procuring able Workmen from Europe. The corporation might engage in such undertakings in several ways; either by advancing the necessary capital to individuals; by building and renting to them the necessary works; or by taking upon themselves the expences of the first establish-

¹ Manuscript torn.

ment, always in proportion to the solidity and talents of the undertakers.

Such are the observations which I take the liberty to lay before you. I know that to you I have no occasion to develop them more particularly, and I hope that you will consider the freedom With Which I venture to discuss your opinion, as a new Tribut of Esteem paid to your private Character, and patriotic Virtues.

I am with respect¹

(69)

THOMAS MARSHALL to HAMILTON, *on planning and locating a cotton manufactory.*

This letter was probably written about September, 1791—after determination had been made to manufacture cotton alone, and before active steps had been taken to locate a satisfactory mill site.

[in pencil] (1791)

Sir/

From the Nature of your enquiries on Saturday I have ventured to presume so far on your time and Candour as to Solicit your perusal of the following lines.

After you have made choice, Sir, of a person for the Directorship the first Necessary Consideration may be that of obtaining Mechanics from England, (if they cannot be got here) for the purpose of making Machinery and assisting in the Conducting of the Manufactory—A Man for the Brass Work, or fileing up Business will be very Necessary; A Person Accustom'd to Superintend the Drawing in the Capacity of "Master of the Room" will be of infinite Utility; A Man who is Master of his business in the weaving branch, and in possession of all or most of the Fashionable Patterns now worn in England will be very Useful; If the Bleaching business is not intended to be confined solely to the Cotton Manufactory, a person Competent to the Undertaking, wou'd I doubt not, well answer the Expençe of Importation: if any of these men shou'd have

¹ This letter has no signature.

Children Accustom'd to work in the Mill their Utility wou'd be greatly Increased.

If the above steps are approved, Sir, it may next be proper to direct the attention towards an Eligible Spot for Erecting the Manufactory upon, in the Judicious choice of which very much indeed depends, the grand Object in this point is Water, and too much precaution and Circumspection in this particular is Impossible, especially upon the very Extensive scale at present Contemplated; for if there is not a regular and constant supply of Water in the driest of Seasons Sufficient to work the Mill 23 hours p^r Day, the interest of the Subscribers will severely suffer. To prevent this, Sir it will be Necessary to be Acquainted with the Source (if easily possible) of the River, the Situation of the Country through which it runs, the Number of other streams that empty themselves into it, and from whence or by what means they are supplied, from these and Similar Observations together with the best Information that can be obtained from those who have long known the River & its particularities, a Judgement may be form'd what Effect a Dry or Wet Season has on it; that is, Sir, wether in a drought there will be a Sufficiency of Water to supply the Works, and when heavy or continued rains happen, what Effects are to be Apprehended either from its Overflowing, or the Accumulated Impetuosity of its Current, which if not known and guarded against may prove totally destructive to the Buildings. Next fixing on a place where the Natural Current (within a reasonable distance) is not impeded by Mills, Bridges, Projections or Eddies: the *Speed* of the Water must be taken; (by which the Interior heavy Wheels are regulated) together with the Quantity of Water it is capable of delivering in a given time: the *Fall* must likewise be measured.

If the Person employ'd in this Business is satisfied about the above particulars, the next Object is the Exact Spot for the Building, and he shou'd consider that not only the common requisites which belong to Mills in General, such as Convenience of good head Water, Tumbling Bays [?] and a Sufficient clearance or decent for the purpose of carrying off the back Water & preventing the Wheel from Sludging, is Necessary: but also that particular regard be paid to the Natural Foundation on which he is about to Build. An Amazing Weight

stands on the Ground therefore it is absolutely Necessary that the Strata to a Considerable Depth shou'd be of a disposition proper to sustain the Burden, such as Stone Gravel or hard Clays; without this precaution, however Judicious any other step, the building must Inevitably be in Imminent danger of having its foundation undermined by the Water, or giving way and falling to pieces.

If the above Obstacles are done away, Sir, the next Step may be that of entering into Agreement with the most able and Experienced Mill Wright to be met with, but as the Nature and Extent of his Employ depends much upon the particular Situation of the Spot &c no decisive rule can at present be laid down. The Building follows next, and perhaps; Sir, you might approve of the Smiths and Carpenters Shops being run up first, which wou'd enable the Machine makers to have some parts ready for setting up, by the time the Mill was finished. The last thing is the market for the raw Material of Cotton

If, Sir, I have mistaken the Information you wish'd to Obtain, I have humbly to Solicit your pardon for the trouble I have here given you, and beg leave to remain

Your Most Obedient

Humble Servant

THO^s MARSHALL

[Addressed] The Hon^{ble} Alexander Hamilton

[Endorsed] Without Date

Th^s Marshall

Manufactories

(70)

WILLIAM HALL to HAMILTON, on selection of a mill site.

NEW YORK 4th Sept^r 1791

Sir/

Last night M^r Mort & myself returnd from the Pasaic Falls—one of the finest situations in the world (We believe) can be made there— The quality of the Water is good & in sufficient quantity to supply works of almost any extent, every thing nescessary as to situation is here to be found.—the Lands ly

well are shelter'd from the winds & are not subject to inundations— This situation so far exceeds our expectations that We are very desirous you shou'd see it— If convenient shou'd wish to meet you there with any other person you think a judge & explain to you our reasons for preferring this situation, after which We flatter ourselves you will agree with Us in opinion— We have seen Col^l Duer He says He will write you on the subject by this Post & will accompany Us to the Falls¹ We think it unnesscessary to trouble you with our report of the Delaware till We have the pleasure of seeing you

Shall be happy to hear from you as soon as convenient
I have the honor to remain

Sir Your most obed^t Hble Serv^t

WILLIAM HALL

No 57 Maiden Lane

[Addressed] Alexander Hamilton
Secretary of the Treasury
Philadelphia

[Endorsed] Manufactory
at Pasaic Falls

Letter W^m Hall
Sep^r 4 '91

(71)

Application of TERENCE O'NEILL to HAMILTON for the position of accountant in a cotton mill.

Sir

A plan having been suggested to establish a Cotton as well as other Manufactories in the United States, on principles devised by your wisdom, and in consequence of which a subscription is set on foot, Mechanics encouraged, and Machines imported to put this National work into execution. Notwithstanding that artists well qualified in every branch necessary

¹ William Duer—again spoken of in a letter of Marshall to Hamilton (see p. 214, below)—was a successful merchant and financier of New York City, and an associate of Hamilton in the S. U. M. His business activities, by the way, form the basis of one section in Davis's *Essays*, already mentioned, where in an extremely able and interesting bit of research Davis paints the picture of "William Duer, Entrepreneur." See *Essays, op. cit.*, vol. I, pp. III-338.

to promote the undertaking may be procured—yet it is as essential that persons qualified to superintend these several Manufactures and who may have a general knowledge of the Manufacturing business, should also be engaged. having been bred for many years to the Business of superintending & keeping the Books of a very extensive Cotton Manufactory in Ireland, together with my experience in the Manchester trade, acquired by carrying on business extensively in that line for some years on my own account; I am induced from these qualifications to offer myself as a person capable of Conducting the Cotton Branch in every particular whatever. I'll assert myself capable of planing the Books, for this business, in a suitable and concise manner and in such order that the accounts shall correspond so as to shew the disposition of every ounce of the Raw Materials and the several operations at one view—which will be a means of preventing fraud in any part of the business, if any shou'd be attempted. the prime cost of every article shall also be calculated, that the Commissioners who may be appointed to make the sales, cannot be imposed on in any respect. In short, I think I may without arrogance assert myself qualified to observe & correct any errors that may occur in any part of this branch of business, as well as to detect any fraud or defect that might appear either thro' neglect or design. Should I on this occasion Sir, meet with your approbation, as doubtless yours will be necessary for every person who may be employed in this undertaking, I shall deem myself highly gratified, and in the mean time shou'd you wish to have any conversation with me on the subject, I shall do myself the honor to wait on you, whenever it may suit your Convenience. such security for my good conduct shall be given as may be required. in case you would favor me with your sentiments on this occasion. I beg leave to inform you I lodge at the corner of Front and Race Streets N^o 137 —

I have the honor to be Sir, your most obed^t
very humble servant

Philadelphia

TERENCE ONEILL

20th September 1791

[Addressed] Honble Alexander Hamilton Esq^r

[Endorsed] Terence ONeil

concerning Cotton Manufat.

(72)

THOMAS MARSHALL to TENCH COXE, *on the location of a cotton mill in N. J.*

Tench Coxe was at this time Assistant Secretary of the Treasury; and his name is associated with that of Hamilton's not only in connection with the Treasury but also in the advocacy of domestic manufactures. He seems to have had no private interest or stake in the S. U. M.

TRENTON Sep^r 18th 1791

Sir/

On my Arrival at this place, I was extremely disappointed at not finding Gen^l Dickinson at Home, and Col. Cox was too much Indisposed to stir out but his very friendly recommendation to Mr Furman of this Town (to whose polite Assiduity I am much Indebted) left me but little room for regret— In my present Undertaking I have Strenuously endeavour'd to divest myself of every Prejudice or Attachment Whatsoever for any particular Place, and this I was enabled the readier to Accomplish, as I was a total stranger to every Inhabitant of such places as were Contemplated as likely to become the Seat of the Manufactories, I am determin'd likewise, to leave my mind free and Unshackled by Acting as for myself *Alone*, Independant of the Society. Thus Sir I have Aranged my own Ideas and am determin'd strictly to adhere to them thro' the process of the Business in hand: but I am Apprehensive that the Sentiments I am about to deliver will greatly Militate, nay perhaps differ *in Toto* from the Major part of the Opinions of others on the same Subject which Colonel Hamilton and Yourself have been Accustom'd too, but I Cannot Suffer my Judgment to be bias'd or Intimidated by the difference of Opinions however respectable the Quarter they come from, and shall with due Deference to others proceed to Announce and Support my own, by facts.—The Delaware is the first Object that has come under my Investigation—The large body of Water contain'd in this River, the flattering aspect of the Falls, Its easy Communication with the first City in the United States and from thence to all the World, its Contiguity to Trenton where the Market is plentiful, Provisions moderate, House rent not dear, and Children Numerous, together with Several other Weighty Considerations, render it so very Import^t an Object

for the Seat of Manufactory that it certainly claims a most serious Investigation, these Exterior recommendations received somewhat of an additional force from the generous offer of Colonel Cox, who will Vent as much of the Canal as runs thro' his own Estate, at his own Expence, if a preference shou'd be given to this place.

I then Sir, directed my enquiries to the Oldest and best inform'd Inhabitants, as to the Particular properties and Nature of the Stream, having finish'd this part of the Business I next proceeded to the Examination of the Falls. Here Sir every flattering prospect forsook me, and my hopes fell to the Ground. By Col: Cox's recommendation I took a Mechanical Genius of the Name of Rozzel who had Measured the Falls with me: this Man made the Level within half an Inch of Seven feet, the Millwright of Trenton Mill had also taken the falls and reckond them at 6 feet 10½ Inches Above the falls it is very little better than a dead Level for a Considerable way, the Water moving rather slowly, Seeming to derive the Major part of its Celerity from the Superior or upper part of the Rivers Weight or Velocity. Below the falls as far as Lamberton, little descent can be reckon'd upon, as it is under the direct influence of the Tides which vary and fluctuate according to their General and Local properties. Under these Considerations Sir, let us suppose a Cut or Canal to be taken from the Top of the falls, directing its Course along the Banks across the Trenton Mill Tail, along the low lands of Col: Cox, and finally emptying itself into the Delaware a little above Lamberton, this is the Course that is recommended as the Most Eligible and to which I perfectly agree, Now Sir this Canal must be cut very near if not quite a Mile, which will be an Enormous Expence, and upon a liberal Calculation will not finally Admit of above ten feet fall. The Ordinary rise of Tides here is full 3 feet, and for Spring tides allowance must be made, add to this the requisite descent Necessary for Carrying off the Water from the Wheel, and the head and fall of the Mill will not exceed five feet & a half, this Sir, is supposing the Canal to be of an Exact Level from its Scource to the Wheel, which of course must not be the Exact Case, however Sir, putting these same Circumstances into the most favourable light, by supposing the Quantity of Water, which might by this means be Obtain'd, as sufficient

to Counterbalance the Deficiency of the Fall,—To Such an Hypothesis I submit the following Considerations, first, That the Grand or at least principle Article in the Choice of an Eligible Spot for the Seat of Manufactory, is, Sufficiency of power or Capability of Extending them as Circumstances may Countenance hereafter, If this Position is admitted Sir, the Hypothesis must be done away, for with such a trifling fall, no more than One Mill can possibly be erected upon the Canal, otherwise than having the Water Wheel of the Calico Printing Mill, fixed Opposite to the Cotton Mill Wheel, which will not be Beneficial to either, and in my Opinion Argue no great Judgement in choice of Situation. But even Sir Supposing that the above Position was not admitted; I have then Secondly and finally to state the following Objection— If a Calculation is made from the forgoing Statement it will be found that the Centre of the Wheel Cannot be above Seven feet from the level of Low Water, What then is to become of the Works when the freshes break up? 'tis well known that those unwelcome Visitors have often raised the Waters double nay Triple that height, and they have, and not uncommonly either, so remain'd for four, Six, nay Eight Weeks at a time, 'tis scarcely possible for freshes to happen without the Mill being in the above [dilem]ma¹ for if they do but raise the Water 18 Inches above [the o]rdinary tide the Wheel will be sludged with Back Water [and r]ender'd incapable of Working— You Sir will doubtless [see] if there is no *other* Suitable Situation?— I Cannot think th[is] is the only possible one, upon this Situation, is, where a Canal is cut along the Banks of the Delaware from the bottom of the Assanpink Creek Stream to the middle ferry, known by the Name of Declines folly, this Name I understand arose from a fruitless attempt of the Same Nature i.e. Conveying the Waters of the Delaware & Assampink Creek, for the purpose of Manufactory; on a cool, Impartial and Dispassionate view of every Circumstance, and to the best of my Judgement having weighed every Pro and Con, I am Necessitated to put my Unqualified Negation to the Delaware at Trenton —

Agreeable to the above Circumstances having given up all hopes of Erecting on the Waters of the Delaware, I next

¹ The manuscript in this part of the letter was badly worn and difficult to decipher.

directed my attention to the Assanpink Creek, upon which the Trenton Grist Mill is Situated, which I survey'd to the best of my Judgement as far up as Necessary, the result of which shall be Communicated to you in my next Letter— Tomorrow I proceed from hence to View the Millstone, from thence to Spotswood, and then to Brunswick, where I expect to be on Wednesday I have a favour to request of you Sir, which is to furnish me with a line to Some Gentleman in or near Newark, that with any Commands you may please to Communicate to me at the Brunswick Post Office, will be respectfully received by Sir

Yr Most Obedient

Hum^{ble} Serv^t

T MARSHALL

[Addressed] Tench Cox Esq^r
Treasury
Philadelphia

[Endorsed] Delaware river
explored for scite
for Manufactories

(73)

THOMAS MARSHALL to TENCH COXE, *on a mill site.*

Sir/

The Assanpink Creek, being very strongly recommended by several Gentlemen of Trenton as a suitable Situation for Manufactories, I Examin'd it two Miles up on both sides of the River, The Grist Mill has got the most desirable Situation, in the *Town* as it were, with a head and fall of near Twelve feet, in short if that spot cou'd not be obtain'd with the upper Waters as far as Handlings Mill, the Creek would not be worth the Notice of Col^l Hamilton, about half a Mile above the Bridge is a spot where formerly an Iron Foundry stood, where works might be erected with about Six or Seven feet fall, a Mile further up is Mr Handlings (Henry I think)¹ Saw and

¹ This insertion and the footnote below marked with an asterisk are added to the manuscript in a hand different from that of the original letter.

Grist Mills, with a head and fall of about Seven feet, the Dam head, bottom Works, Bridges and Race are in tolerable good repair, but the Buildings are all falling to pieces, and as I understand he is too poor to rebuild them, he wishes to Sell the Mill and its Appendages together with four Acres of Land, which has a Dwelling House & out Offices upon it, from this Mill to Lamberton is just a Mile & half which of course must be Land Carriage—the Land on both sides the Creek the Gentlemen promise to dispose of to the Society on the most reasonable Terms, the Situation of the little River is Undeniably Good and very little troubled when the freshes prevail which ought to be a great recommendation, but the Doubt I have I fear will prove fatal to it,— the Gentlemen assured me the Waters were never less than when I saw it, but I have a strong propensity to think otherwise and if they ever contain a smaller Quantity, I am of Opinion they cease to be worth the Notice as a Seat of Manufactories; but as I am not positive in this point, I do not wish to Injure any favourable Impression Col: Hamilton or Yourself May have for this Situation.

On my Way hither I slightly examined Stoney Brook, but as every thing about it carried a Negative, I left it, and proceeded to the Mill Stone the waters of which are too Wild, too Level, and too far from a Navigable River to merit the attention towards any Establishment there— I next proceeded to Spotswood* from whence I am Just return'd. this place Sir, in my humble Opinion claims a regard Superior to any I have yet seen, the Waters here are strong and Powerful, Never fail of a Superfluity in the Dryest Season, and tho' a variety of Works are now carried on at the Exact Spot I allow to be the most Eligible, yet they are daily falling into disrepute with the Owners, from a Variety of Complicated Circumstances, And no doubt remains but all may be purchased at a fair Appraisalment—two Mills may with the utmost propriety be Erected on *One* Situation (from the Width of the River, and Length of Dam head already built) and One short Mile above this, a good Situation, where a Mill unused now stands, with Seven feet head & fall—and a short Mile on the other side is a River call Deep []¹ where Oppertunities present themselves, this

* This place is about 14 Miles E. S. E. of Brunswick.

¹ Word obliterated in the manuscript.

Situation is one Mile from the South River, but everything may be carried by Scows from the Mill Tail thither, and from thence Ship'd,—Provisions are cheaper than I have hitherto met with any where else, & the Wood 5/ p^r Chord Cheaper; tis Situated on the Stage Road from Amboy to Burlington 10 Miles from the former & 40 from the Latter Place— But the Ground about the Country is very poor; not very thickly Settled & Leveler than I wish it, Altho' they are not troubled with any back Water of Consequence nor are they much Injured by freshes— Here four if not more Mill Situations Might be got within One Mile of the Centre, and two of them on the Same Spot— And tho' On Account of its Quantity of Water (which never fails) I give it the preference to the Assanpink, I do not think on the whole it enjoys near so desirable a Situation.

I am Sir Yr Most Obedient &c

T MARSHALL

[Addressed] Tench Cox Esq^r
Treasury
Philadelphia

(74)

THOMAS MARSHALL to TENCH COXE, *on a mill site.*

NEWARK Sep^t 27th/91

Sir/

Not being able to procure a Chaise at Brunswick I was obliged to drop my design of going to Sidney from thence and to proceed hither I have been a Considerable way up Second River, a shorter distance at First and Third, and also to Raway Brook at Springfield, this last named place I visited at the Particular desire of M^r Budenot of Elizabeth Town, but as neither Quantity of Water nor Contiguity to Navigation bear any Equality with Second River I must decline recommending it as deserving of Particular Notice— Spotswood, and Assanpink, dwindle into Insignificance before Second River, much might be said in its favour, and but little against it —

M^r Van Courtands Grist, and M^r Maxwell's Snuff Mills I am

inform'd are to be disposed of, add to these, about a Quarter of a Mile above the Snuff Works, one of the most desirable Unoccupied Situations I ever beheld, Nature has so placed the two hills that the Bank Work for the Dam will be Wanting but the Head, a Quarry of excellent building Stone almost on the Spot, good drinking Water, plenty of Wood and but about a Mile from the Pasaick, *above* this Spot other Mill Seats are to be found with nearly equal Qualifications, and if they shou'd be thought too far from Navigation, First River wou'd not be found Deficient for Lighter Works where the Objection wou'd be done away, a Road which wants but little Amendment (having been already used) will bring the Seat of Manufacturing within three Miles of the middle of Newark in short tis a Spot that has as many Recommendations with as few Objections, as can be found, and had I the Money within myself, Second River shou'd be the Seat of my Manufactory—I proceed Sir tomorrow for N York on my private Concerns, from whence I mean to return by Saturday or Monday to Trenton, where I shall take Chaise for Sidney unless I find other Commands for me at the Post Office, and am Sir with respect

Yr Most Obedient
Humble Servant

T MARSHALL

[Addressed] Tench Cox Esq^r
Treasury
Philadelphia

[Endorsed] 27th Sept 1791
T. Marshall
Manufactory

(75)

THOMAS MARSHALL to HAMILTON, *on a mill site.*

Oct^r 2^d 1791—NEWARK

Sir/

At the particular desire of Col^l Duer I Yesterday visited the great falls of the Pasaic, Accompanied by a Monsieur Allou

of this Town. I was requested not to make enquiries on the Spot, for fear of my design being discover'd, which being known Col: Duer thought wou'd affect the Price of Land—I am fearful that it will be found impossible to take the Necessary steps, however cautious the persons may be, without their design being discover'd—Col: Duers recommendation of Mons^r Allou for a Companion was attended with some particular Circumstances, this Gentleman is totally unacquainted with English, and I Ignorant of French, and of course our Conversation for 32 Miles was very Interesting to the Society—on our arrival at the Falls I concluded Mons^r A wou'd have conducted me to the place destin'd for the Canal, but after a Bewilder'd ramble in the Woods, I found he had mistaken the side of the River, being Inhibited from Enquiries I found myself in an awkward Situation— at length We gaind the Falls, still I was dissatisfied as *this* appear'd not to be the place destin'd for the Cut— I understood that Col. Duer had requested him to take me to the *Exact spot*— I used every means in my power to make him sensible of this—and I thought he was proceeding to the place, when after pursuing the run of the Pasaic for about four hundred Yards above the falls, thro' thick woods, at length we were stopt as we found them Impenetrable any further I must confess Sir, I found myself much at a loss how to Account for the events of this Day, if there was a design or wish for *me* to fix upon a spot without being permitted to have follow'd my own Inclinations and not to have been *led* by Mons^r Allou, but I really think Sir, 'twas nothing more than the Forgetfulness of my Companion. I therefore took every means in my power to relieve the Anxiety his mind was evidently in, but was obliged to return with only a transient view of the Falls and aspect of the Country—the Body of Water is beyond Compare, and that it may be drawn off in any Quantity appears extremely probable from the situation of the Adjacent Country, the Expence of the Canal I understand from Col. Duer, Mons^r Allou estimates at 2000£, the Navigation he asserts may be brought within a small distance of the Works at a very trifling Expence, but I have some reasons to differ in opinion on the latter Subject as far as concerns Expence— but cannot speak positively— Stone is in abundance, and some of it I think doubtless good, tho' what

I saw had no very powerful recommendations— The Country about the Falls is cover'd with Wood, Consequently that article cannot be very dear— Beef & Mutton at $3\frac{1}{2}$ and 4^d pr Lb—by Land exactly 19 Miles from N York and 16 from Newark, this, Sir, is all I am enabled to say at present, but must confess that I am favourably imprest from the Transient view I had of things, the Expence attending the Canal and making the Pasaic Navigable for such a distance are Objects Sir that I respectfully recommend for your Consideration, and when the Pasaic is froze Land carriage for such a distance will fall heavy, if Sir, these Objections are nothing compared to its requisites, I am of Opinion it will be found to be the best Situation, that is Sir, it will have more water, & the Land may be had cheaper here than at Second River, but it has almost every thing else to recommend its preeminence over the latter, thus Sir, I venture to differ in Opinion from others who have gone before me, and if I am wrong in my Statements it arises from Ignorance only, for I think myself as warmly attach'd to the Prosperity and Interest of the Society as any individual directly or indirectly concern'd, and have endeavour'd to guide my conduct by these Sentiments in the little concerns that have hitherto fallen to my lot.— If Sir, I receive no other Commands I shall proceed from Trenton to Pitts-Town on Tuesday, and am Sir with the utmost respect

Yr Most Obedient

Humble Servant

THOMAS MARSHALL

The Hon^{ble}
Alex^r Hamilton

[Addressed] The Hon^{ble} Alexander Hamilton
Treasury

Private

Philadelphia

[Endorsed] 2 Oct^r 1791
Thomas Marshall

(76)

THOMAS MARSHALL to TENCH COXE, *on a mill site.*TRENTON Oct 10th 1791*Sir/*

The Muscaneetcong Creek being highly spoken of by several disinterested people I took an Oppertun^{ty} of Visiting it on my way to Sidney. I left my Horse at Alexandria and proceeded to the Creek (15 Miles) in a Durham Boat, which enabled me to Judge of that mode of Conveyance and enquire particulars concerning it, I Survey'd the River for three Miles and a half from its mouth, and took the Level of every fall of Note in that distance—for One Mile from the Delaware this Creek is Affected by freshes, the first Mill seat that cou'd be made use of is an old Forge where a moderate head and fall might be obtain'd, about One Mile further a better Situation (un-occupied) presents itself, indeed, I am persuaded *two* Seats might be obtain'd between the Old Forge and Mr Hugh's Mills, this Gentlemans Works come next, where I found a pretty good Situation turn'd to very Indifferent advantage, the Water & Mill Works are little short of total Ruin, Executions are upon the Premises and tis Expected shortly to be sold for the Benefit of the Creditors. this Estate runs a Mile up and a Mile down the Stream from the Seat of his Manu- factory, a small Village is situated on the Banks of the Creek Adjoining his Forge which is extremely well adapted for Extension, about half a Mile above his Mill is a good Seat Suitable and Eligible for the most Important Undertaking in point of Fall, Water, & Foundation, this Situation being $3\frac{1}{2}$ Miles from the Delaware, I thought proper to decline Sur- veying any further, the Muscaneetcong is surrounded by exceeding high hills on both Sides, which are cloath'd with tolerable Timber, the Settlements in the back Country are thick, producing excellent live Stock & Corn, and Capable of Supplying the demands of the Manufactory on reasonable terms, the present price is as follows, Beef $2\frac{1}{2}$ — Mutton $2\frac{1}{2}$ & 3^d Veal $2\frac{1}{2}$ & 3^d — Butter 9^d — Cheese 6^d — Rye $3/6$ — pr. Bushel, Wheat $6/$ Wood $1^s/$ pr Chord if Cut and carried at the Expence of the Purchaser but $6/6$ or $7^s/$ if brought to

your door— The Waters of the Creek are under the Influence of Freshes having been known to rise four feet, the Body of Water is sufficient for any purpose of Manufactory, its mean Width being 58 feet, and its average depth 32 Inches, and its Ordinary Speed somewhat better than three Miles pr Hour, tis about 80 Miles pr Land from N York and 50 from Philadelphia the Country appears healthy and the Land pretty good— the Mode of Conveyance to and from this Place must be by means of Durham Boats, the Largest Size of which Carry from 16 to 20 Ton *down* the Stream and generally bring 4 or 5 Ton *back* with them, the Freightage of One of these boats from the Muscanetcong to Philadelphia, and back, carrying the above Weights, will cost about 10£ Currency, they are generally four days in performing this Voyage— I Saw the Nissasahawa and Burn Mill Streams but as they are too Insignificant to merit the attention of the Society I shall not trouble you with any Account of them— I have this morning seen Col: Cox who offers every *other* Lot, free of Purchase, to Col. Hamilton if he prefers the Assanpink Creek, the Spot contains upwards of 100 Acres on the Banks of the Creek adjoining the Old Forge, he further declares that Stoney Brook may be brought into the Assanpink by a Cut not Exceeding 150 Yards— by this post You will also receive my Sentiments of the Waters at Sidney, and am Sir

Yr Most Obedient

Hum^{ble} Serv^t

T MARSHALL

[Addressed] Tench Cox Esq^r
 Treasury
 Philadelphia

[Endorsed] Oct. 10, 1791.

(77)

THOMAS LOWREY to HAMILTON, *on prices of provisions and fuel, on labor conditions, transportation facilities, &c., near Trenton, N. J.*

Thomas Lowrey was representative for his district in the state legislature, and later in this year, 1791, served as chairman of the committee to which the petition of the S. U. M. for incorporation was referred (Davis, *op. cit.*, vol. I, pp. 377-8).

ALEXANDRIA IN NEW JERSEY, *October 14th 1791*

Sir/

Agreeably to my promise when I last had the pleasure of seeing you, I am to inform you of the prices of the sundry articles of Provisions, Fuel, Labour &c. in the upper part of Hunterdon Country & of Sussex County within this State, from twenty to forty Miles above Trenton in the Neighborhood of the Delaware and Raritan Rivers & shall proceed in such order as appears to me regular Viz^t

Wheat Flour	15/ p C ^{wt}
Rye ditto	10/ do
Indian Corn	3/ @ Bush ^l
Buckwheat	2/ do
Pork	3 ^d @ 3 1/2 p lb
Beef	2 ^d @ 2 1/2 do
Mutton	2 1/2 @ 3 do
Veal	2 @ 2 1/2 do
Butter	7 @ 8 do
Potatoes	1/6 @ 2/ p Bush ^l
Turnips	9 @ 10 ^d do

Poultry of all kinds very plenty & low Priced.—

The above quoted prices have been nearly the Average for these many years past, but there are instances of some of the articles rising at certain periods, and some other periods lower than the above quoted prices, particularly wheat flour.

The article of Fuel, as Wood, is at present in the above described limits, abundant, and may be purchased standing at the rate of one shilling per Cord, & if delivered at any place

of Landing may be had at the rate of from seven shillings and sixpence to Ten shillings p Cord, for I should suppose one hundred years to come, there are vast quantities of Wood on the Hills adjoining the Delaware for one hundred Miles up, which with ease may be collected & rafted down on the Water.—I would further observe the article of Coal as in my opinion worthy of a degree of consideration for a future resource as to fuel, and shall here take the liberty to mention that the Mountains on the Susquehanna in the Neighborhood of Wyoming and up the Lahawanick (which is not far distant from the Delaware, and on the same Direction of Mountains which Cross the Delaware) contain in their Bowels, quantities of Coal, of the Kend[.]¹ or blazing kind almost inexhaustable. They are found so near the surface as to require very little trouble or expence in mining, & answer effectually every purpose for which coal is usually employed except tempering scythes &c. and this can be easily remedied by a small addition of Charcoal. From this circumstance as the distance is not very considerable the conjecture is a natural one and far from being improbable that the mountains on the Delaware are also impregnated with this valuable and useful material. To this opinion I am not led merely by conjecture for in the periodical Floods which we have in the Delaware it has been frequently observed that stumps of Trees which were brought down by the Torrent had small quantities of Stone Coal adhearing to their roots. This then puts it past a conjecture that the Coal exists on the Delaware, and the period I hope is not far distant when the Discovery of its local situation will be made, so as to be a principal aid in the Establishment of Manufactories in this part of the Country.—

As to the hire of Labour, I shall also give you as exact an account as I am able. The Labour of an able bodied Man may be obtained for from fifteen to eighteen Pounds per annum if found in provisions and Lodgings, if found by himself, the Labour may be obtained, at from twenty five to twenty eight Pounds per annum.— the Labour of a Woman as above from seven to eight Pounds, if found, if on the contrary the same allowance for finding themselves as above. These prices for Labour it is to be considered is to be applied to prime hands,

¹ Hole in manuscript.

and the proportion may be easily calculated as to inferior & youths of both sexes, according to the weight of the Labour.—

With respect to the transportation of produce down the Delaware, as far as to where the tide meets the Current, or Trenton Landing, is by Boats commonly called Durham Boats, which carry with great safety, from Ten to Twenty Tons burthen down, & will bring from four to eight Tons up. The cause of the difference of burthen in these Boats, is calculated for the purpose of keeping one or both of them employed as the Water suits, the smaller description are altogether employed when the River is so low as not to admit the larger ones to carry a load but there is a probability of the Navigation of the River being much improved by the obstructions being removed, which were in several of the falls in the River, This work has been carried into effectual execution in some places last Summer, & it is thought will be generally so in the event. when this improvement is effected it will admit of Boats of much greater Burthen & will consequently reduce the price of freight. This [sic] Boats for the most part go down to Philadelphia with almost all the Produce raised in the Country. The average time of these Boats in making their trips is four to five days going and coming, The freight of the large boat for one trip is from seven to eight Pounds and the small one in proportion as the former takes five hands to work it, the latter but three.

The soil of the Country is extensively luxuriant The Hills covered with wood, the Vallies fine arable Land, & largely proportioned with Meadow Ground.— The healthy situation of this part of the Country is so well known as not to need any explanation on that head.—

The situation of Musconeetcong River which empties into the Delaware, is not more than 45 Miles from the City of Philadelphia by land, & seventy Miles by Water. its being so remote from the Cities of Philadelphia & New York, will ever prevent the rise of Provisions and Fuel.— The most eligible Stream for heavy Works, or Works of any kind within my knowledge in this State, is the abovementioned Musconeetcong, where materials for erecting Buildings of every kind are in abundance & Cheap. Viz^t Square Timber Boards, Shingles, Slate, Stone, Stone lime &c. &c.— Boards of inch & quarter

Thick from 50/ to 60/ p M feet. Shingles from 50/ to 60/ p M, first quality, Stone easily to quarry, and at hand, good Stone Lime delivered at seven pence p Bush¹ Sand also at hand. There is a Mountain sixteen Miles up the River from this situation, which will produce any quantity of Slate.—

I hope to be in Philadelphia in the course of the ensuing Week when I intend to do myself the pleasure of waiting on you in Person.—in the interim I beg leave respectfully to submit the foregoing & remain,— Sir

Your very obed^t & humble Servant —

THOMAS LOWREY

Alexander Hamilton Esq^r
Secretary of the Treasury

[Endorsed] Alexandria in New Jersey
Oct. 11, 1791 Thomas Lowrey

(78)

THOMAS LOWREY *to* HAMILTON, *regarding choice of a mill site.*

ALEXANDRIA NEW JERSEY, 15th October 1791.—

Sir!

I did myself the pleasure of writing you yesterday and as an immediate conveyance presented itself, I must confess that being eager to come forward with what information lay in my power, as early as possible, through hurry I had omitted one very particular observation which I fully intended to have made.— I have therefore taken the Liberty to address you again and shall make my omission the subject of this Letter.—

In my letter of yesterday the method of transportation down & up the Delaware and also the Price of Freights constituted a part & I should have observed that altho' this transportation will consequently be attended with expence to a Manufacturing Society, I would here place against such charge the low price at which Fuel can be obtained in this part of the Country & in order to strengthen a calculation which has been had on that part of the business, a Number of Gentlemen would readily

enter into contract, safely to insure & conduct all materials and products of the manufactory to & from the Mouth of Musconeetcong to the Landing of Trenton for the consideration of the difference which may be, between the price of Fuel & provisions for the supply of the Manufactory, (which may be estimated) between the situation on the Musconeetcong and any other situation which may shew a Colour of competition. I am induced to observe this in particular knowing that several surveys have been made of the different Streams of Water, within this State, & perhaps several yet about to be made in, *or near* it.—

As I mentioned in my letter of yesterday my hopes of waiting on you in Person in the course of the ensuing Week I still hold when I shall explain myself more fully than the bounds of a letter will reasonably admit.—

I remain respectfully,

Sir,

Your very obed^t & hum: Servant

THOMAS LOWREY

[Addressed] Alexander Hamilton Esquire
Secretary of the Treasury
Philadelphia

[Endorsed] Alexandria New Jersey Oct. 15. 91
Thomas Lowrey

(79)

JOHN HALSTEAD *to* HAMILTON, *trying to secure a branch of the cotton manufactory for Perth Amboy, N. J.*

PERTH AMBOY Oct^r 31st 1791

Sir

Having seen your plan, for the formation of a Manufacturing Company, and the reasons you have assigned for establishing it in this State, with the Idea, that the plan is too extensive to be carried into full effect in one place to the best advantage to adventurers; induces me to request you to propose to the

subscribers, this place, or its Vicinity, for one of the places of Manufactory, and the principal place of sale— To encourage which, I take the liberty to inclose a sketch of the Town the waters Eastward which is the best and principal Harbour, with a Farm of four Hundred Acres, contiguous to the Town for sale in whole or in part; and I annex some proposals to the Company respecting the same, which I have to request, you will lay before them, or their Committee, as you shall find most proper.¹

The Proprietors of the Farm, propose to lay out forty Acres, in four equal squares, to be divided into such Lots, as the Company shall approve, and to give to the Company on[e] half the same, reserving the other half to themselves, and occasionally to sell to the Company or any other Persons at reasonable rates, such additional lands, as they may incline to purchase, or to sell them the whole Farm, if it shall best suit them on view of it.

The Farm is within three fourths of a Mile of the Town, there are several situations well calculated for erecting a Town on, particular two, very convenient for Transporting by Water, to or from the Town or Elsewhere, the Navigation, being little interrupted in the severest Winters; There is a good situation for a Tide Mill, on a Creek sufficient to answer all the purposes, of grinding for the Manufactories, and perhaps some other purposes;— The situations are very healthy, pleasant, and conveniently situated to collect the articles at, that may be Manufactured at other places, or to supply them with materials from,— On said Farm, there is Clay of the best quality for bricks, which may be made at a landing to save expence of Carting, also Clay, of tried and approved quality for Earthenware The convenience of Transportation by Water will secure a supply of fuel, provisions and raw materials for Manufacturing, as well as an easy access, to purchasers of Manufactures, or conveyance of them to other markets.

The Owners of the Farm, will be reasonable in their demand, and as they wish to promote every thing, that will tend to advance publick good, they would in case of a Sale, chearfully subscribe the full amount to the factory.

There are some Lots in this Town, the most convenient, and

¹ Nothing corresponding to this "sketch" or these "proposals" is to be found among the Hamilton Papers at Washington.

best calculated for Wharves, Warehouses, and dwelling for Superintendants, or others, for sale.

Not having any safe method of laying the above proposals and plan, before the subscribers, induced me to Inclose it to you for that purpose, and will I hope be deemed a sufficient excuse for my giving you this trouble.

I am very respectfully

Sir

your most Obedient Humble Servant

JOHN HALSTED

The Hon^{ble} Alexander Hamilton Esquire
Sec^y of the Treasury
Philadelphia

[Endorsed] 31st Oct^r 1791
Collector of Amboy
concerning Manufacturing Society

(80)

ESTIMATE *of the cost of equipping* A FLAX AND HEMP SPINNING
MILL, *by an unknown author.*

Spinning Machinery

It is recommended that three hundred and twenty small spindles be made of the size adapted to yarns fit for sail Cloth N^o 1 to 8. Russia and Ravens duck, Russia sheeting, drilling, stoutest diaper, oznaburgs, ticklenburgs, bagging, stout bed ticks, dowlas, and in general strong coarse linnens worth in Europe 6^d to 15^d sterling Yard. These would occupy one floor of a Millhouse thirty six feet square in the clear.

On the other floors the preparing Machinery for these three hundred and twenty small spindles would be placed—and would occupy half the Area. The other may be employed with eighty spindles fit for spinning yarns for cordage and twine of all the various kinds.

The cost of the three hundred and twenty small
spindles including the appurtenant preparing
Machinery will be twenty four shilling ster-
ling p. spindle or forty shillings Pennsylvania
currency — Amount £ 640 ..

The cost of the Eighty large Spindles for Cordage
would be about 160

The three hundred and twenty small Spindles
would spin eighty thousand pounds weight
of dressed flax and hemp p Annum, and a
Capital and credit equal to the purchase of
one fourth of that Quantity would be re-
quired—i.e. twenty thousand pounds weight
at one shilling for hemp and flax dressed... } 1000 ...

The eighty large spindles would spin about One
hundred and forty tons of hemp p Annum;
and a capital and Credit equal to the purchase
of one sixth of that Quantity would be re-
quired—say 25 Tons at £50 p Ton..... £1250....

£3050....

N.B. Instead of the eighty spindles for Cordage One hundred
and sixty spindles *more* for flax, hemp and combed wool may be
adopted; in which case £160 more is to be added to the cost of
the Machinery, and five hundred pound for the capital of
Quarterly purchase of 10,000 lb dressed flax and hemp is to be
substituted instead of the sum of £1250 to buy hemp for
Cordage.

Expences

Thirty two boys and Girls to attend the frames
Twelve Men or Women to tend the silvering Machinery
Two Men to overlook
Four Women for covering Rollers
A Turner in Iron and Wood—(say £5 p.day for the whole)

If three hundred and twenty spindles only are used for the yarns for sail and other linen Cloths at ten Cuts each (of the Irish Reel) they will work up $266\frac{2}{3}$ lb flax and hemp of 12 Cuts p.lb, being $266\frac{1}{3}$ dozen of Yarn at 9 ^d or ten Cents p. lb. (the cost of spinning here) is $26\frac{2}{3}$ Dollars or £10 p day for for 300 days is p. Annum		£3000....
If the other 160 spindles be employed on Linnen Cloth add		1500....
		<hr/> £4500....

N.B. The whole 480 Spindles at 400 lb p.day for 300 working days would make 120,000 lb yarn equal (at 35^{lb} p. p^s of No. 4 canvas) to 3428 pieces.

If the 80 Spindles be employed on strands for Cordage they will make of white yarns 140 Tons—to be laid at the factory, or sold to the Rope Makers.

The mill house should have one end closed with a frame, and not built up with stone or brick, because it would be well to be able to add 50 p Cent to the number of Spindles by enlarging the house if it should be deemed eligible.

The adjacent farm or land should be handsomely and regularly laid out into a Town plat, so that tradesmen who came to settle about the spinning Mills might be accommodated with lots from one Acre to 20 feet by 100 feet could pay for them, or on ground rent. About seventy weavers would be wanted to work up the above Quantity of 120,000 lb of linen yarn; besides bleachers, porters &c^a and the necessary tradesmen for Clothing and building &c^a There are supposed to be about seventy Ropemakers in the several Walks of Philadelphia who are said to make about 500 Tons of Cordage p annum. Should the yarns for Cordage become an object it will be well to lay off a couple of complete platts for Ropewalks one end of each of which should be adjacent to the spinning Mill.

The Mill geer (exclusive of the spinning Machinery) will be a Water wheel, and upright shaft, and four lying shafts with their face wheels which are all that will be necessary.

Wear and tear are to be remembered in the calculations.

It is plain that this Mill which almost intirely avoids manual

labor and works in a raw Material (Flax) which is cheaper here than in Great Britain Ireland and Holland would succeed with due oeconomv, skill, & attention.

[Endorsed]

Estimate of an establishment
for waterspinning of flax
and hemp—on a capital of
8 or 10,000 D^s

(81)

ESTIMATE of the cost of equipping A HOSIERY AND STOCKING
FRAME MANUFACTORY, by an unknown author.

Estimate of the capital emediatly wanted for carying on the
Hosiery Manufactory, & the Stocking frame Making agreable
to the Scale proposed in the first estimate

	[weight]		[£	s.	d.]
Wood work for Seven frames			14	..	..
One press for finishing Hose			50		
800 lb Cotton Yarn	@	6/	240		
10 Dozn Leg Boards		24/	12		
100 lb Soap		8d	3	6	8
1 Barril Pearl Ashes	300	£2/2	6	6	
20 lb Candles		11d		18	4
50 lb Tallow		1b 9d	1	17	6
2 Smiths Anvils	200	@	10d	16	13
4 " Vices	50		16d	3	6
2 Sledge Hammers	12 & 15		11d	1	5
3 Hand Do	3 & 4 & 5	1/		12	8
Barr Iron	2.000	30/	30	..	..
German Steel	50	8d	1	13	4
Sheet Iron	100		3	10	
2 Pairs Bellowses			13		
3 Board Hammers	1 1/2 & 2 & 3	11d		5	11[1/2]
2 Screw plates			1	17	6
2 Stakes	12 & 16	1/	1	8	
1 Pair Sizrs		16/	2	5	
Spring Wire	50	1/6	3	15	
2 Braces		10/	1		
Wheel & Bobins			1	10	
Pewter	20	1/	1		
Brass	50	1/ 10	4	11	8
Servants Wages for 3 Months			246		
Contingent { Servants Expences at Philada } Charges { Ditto to Patterson } { Freight of goods to Patterson }					

The Background of
Hamilton's Report
on Manufactures

The Background of Hamilton's Report on Manufactures

FULL appreciation of Hamilton's Report on Manufactures is impossible without some knowledge of the conditions, economic, political, and intellectual, under which it was written. Obviously no thoroughgoing account of these conditions can be attempted here, but a brief sketch is possible. This must be limited chiefly to those features of the general situation which bear most closely upon the contents of the Report, and help us most readily to apprehend the origin and nature of the arguments for protection advanced so ably in that document.

First, it will be at once understood that in 1791 the United States was not a manufacturing nation in any substantial degree, nor had manufactures been stimulated appreciably by the disturbed commercial conditions of the Revolutionary War. To be sure, certain industries closely connected with war supplies, such as the manufacture of powder and of firearms, had been initiated or enlarged; and the household production of divers necessities, such as woolen cloth, had been broadened. The Revolutionary War, however, should not be considered a true dividing line in the industrial history of this country; and it will be noted that Hamilton gives little consideration to war-sprung manufactures as a basis for his protective argument. He suggests that "the extreme embarrassments of the United States during the late war, from an incapacity of supplying themselves," were still a "matter of keen recollection"; but his plea for protection, unlike that of many protectionists after the subsequent wars in which the country has been involved, is not based upon the need of nurturing "war babies". The feature of "vested interests", indeed, plays on the whole no significant rôle in Hamilton's argument. To be sure, he indicates a "most ardent" wish to "cherish and bring to maturity this precious embryo" of the Hartford woolen factory, and elsewhere shows keen interest in existing enterprises; but the

whole tone of the document is one of anticipating a glorious future for its own sake, and not one of attempting by government intervention to provide shelter for the accidents of the past. In short, while existing manufactures were at that time sufficient in number and diversity to give support to a proposal for further development—to infuse confidence into the speculation—the state of domestic industries should not be looked upon as the occasion for Hamilton's advocacy of protection.

The political situation in 1791 was a more important factor, at least in so far as it resulted in a set of commercial conditions unfavorable to the United States. Political independence had not resulted in commercial independence; and the new nation, having now placed itself outside the area of the British Empire, found its position difficult. An inquiry made but a couple of years after the composition of this Report,—in 1793,—exhibited the many "restrictions" with which the navigation and commercial laws of foreign countries surrounded the trade of the American nation. "Our tobaccos are heavily dutied in England, Sweden, and France, and prohibited in Spain and Portugal"; "our bread stuff is at most times under prohibitory duties in England"; Spain and Portugal "refuse all direct intercourse" with their American possessions: in short, trade was generally difficult and almost everywhere cumbered with restraints.¹ Here in the Mercantilistic policies of foreign nations was a real excuse for a greater self-dependence. Obviously, if other countries limited trade with us and would not permit the purchase of their goods on terms advantageous to us, a possible remedy was to set up our production of those commodities—manufactures—which we chiefly secured thence.

Thirdly, a word may be added as to Hamilton's intellectual background. Into an age, of which the characteristic feature of commercial policy was still a considerable reliance upon artificial barriers to trade, had burst Adam Smith's book, *The Wealth of Nations*, published in 1776. This treatise proved epochal, changing profoundly the course of human thought on matters economic. William Pitt had been a student of this volume, and as the youthful Prime Minister of England already by 1791 had instituted measures which tended to make England's commercial policy conform more closely with the laissez-

¹ *American State Papers, Foreign Relations*, vol. I, pp. 306-304.

faire precepts laid down by Smith. Curiously enough, Hamilton, the first protectionist, was also a student of *The Wealth of Nations*. Numerous paraphrases of passages in that book may be pointed out in the Report on Manufactures; and at one place, where Hamilton is speaking of the benefits to be derived from improved means of transportation, there is a sizeable literal quotation from that source.¹ But beyond the more or less direct dependence of Hamilton upon "the father of modern political economy", the more general influence of Smith is important to note. Indeed, the whole cast of Hamilton's argument seems to have been affected by the study which he had made of *The Wealth of Nations*—as will appear to some degree in the analysis of the Report hereunder subjoined.

A secondary element in Hamilton's intellectual background was the haze of Physiocratic doctrine which, despite attempts to dispel it, still influenced the economic thought of his time. The Physiocrats were a school of writers in eighteenth-century France, among whom Quesnay and Turgot, finance minister, of Louis XV, were most prominent. The distinctive feature of their views was the emphasis upon the productivity of land. They believed that agriculture had a peculiar productivity, upon which, indeed, all other elements in the population depended. No one was really productive except the farmer. These views, to be sure, were known to Smith, were considered by him in his book, and rejected. But, as just suggested, the ideas of the Physiocrats were still current; and, since they were so diametrically opposed to the policy which Hamilton had set himself to advocate, he felt it necessary to give them some special consideration—a consideration which forms an essential section of the famous Report.

Then, finally, one must realize in a consideration of Hamilton's position that he was working almost without precedent in the field of protectionist theory. He was breaking a new path, except in so far as he could draw upon the fund of Mercantilist doctrine which still retained its hold over the commoner minds of the period. The only inspiration which could have carried much weight with him was that which came to him from the existing, popular clamour for domestic manufactures. This desire for domestic production of manufactured goods arose

¹ See pp. 298, below.

first in the conflicts with the mother country that preceded the Revolutionary War, and was heightened by the popular movements of the Revolutionary period itself. It persisted as part of the country's heritage from the War, and has since that time never wholly lost its hold upon some sections of the American people. Moreover, this agitation had by 1791 brought forth some fruit. It had led to the enactment of tariffs of a distinctly protectionist flavor—low, of course, but surely not for revenue only—both in certain states during the period of the Confederation and in the federal Act of 1790. These manifestations of public interest in manufactures, however, were not productive of theory. The earlier ones had no conscious basis other than a fond desire somehow to hit at England through her merchants, and the later emphasized only the desirability of national self-sufficiency (as far as practicable), because of possible military needs and because of the inconveniences suffered during the recent dislocations of normal commercial relations with Europe. Expediency, not rational policy, guided the advocates of protective measures in those days. The formulation of a broad, theoretical basis awaited the genius of Hamilton.

With this hasty glance over the conditions under which the Report of Manufactures was drafted, we may turn to the document itself. At the outset I would suggest that I have not attempted here a meticulous examination of the ideas therein expressed, nor any substantial criticism of those which in the light of subsequent advances in economic theory today seem erroneous. I wish merely to indicate the principal sections into which the Report may be divided, the questions raised and answered by Hamilton, and the features thereof which today seem strange or unusual. The interrogations which I have set myself are: Just what does the Report contain, and in how far are its contents a reflection of the time at which it was written?

The initial problem which Hamilton sets himself to answer is whether or not, as a general proposition, manufactures should be encouraged. Here he is immediately concerned with the Physiocratic contention that agriculture alone is productive; and, even if this extreme position be relinquished, he must

deal with the dictum—perhaps more plausible and so more dangerous—that agriculture is “the most beneficial and productive object of human industry”. Of such views Hamilton cannot permit a single pretention to remain, or his later advocacy of manufacturing industry might as well at once be dismissed. And he proceeds first to a thoroughgoing demolition of the Physiocratic position, at least in so far as he can by his own ingenuity and that of his predecessor, Adam Smith,—from whose *Wealth of Nations* he here presents a long paraphrase. This portion of the Report, however, is of little present-day significance. Not only would we nowadays attack the Physiocratic position with somewhat different weapons, but the views of Quesnay and his followers no longer have currency in our thought, and an elucidation of their error would here have little more than academic interest.

In refutation of the second point, the alleged superiority in productivity of land, Hamilton has to advance independently beyond Smith, who had admitted a special effectiveness of labor engaged in agriculture. Smith had suggested that “in agriculture nature labours along with man; and though her labour costs no expence, its produce has its value as well as that of the most expensive workman”.¹ But, says Hamilton, the labor of man alone, if it be applied with “great skill and art”, may be more productive than the combined work of nature and man, if their operations be directed towards “more simple” objects,—although, to be sure, he fails to show what “more productive” in this case really means. And besides, adds Hamilton, nature does in fact work with man in manufacturing industries, since there “the application of the mechanical powers” involves the aid of nature. Hamilton then goes on to observe that labor in agriculture lacks some evidences of productiveness, which on the other hand labor in manufactures does possess. In the former case, work is “periodical and occasional, depending on the seasons”, and, because of the fertility of the land, is not infrequently careless; whereas in manufactures labor is “more constant, more uniform, and more ingenious”. And, lastly, Hamilton seeks to draw the props from under the argument advanced by other writers that land must be more productive since it alone yields a rent or “neat

¹ *Wealth of Nations*, Bk. II, chap. 5.

surplus". His contentions here are unacceptable to most modern economists, especially when he asserts that "land is itself a stock or capital"; but, then, one should not forget that Hamilton was writing when economic science was very young, nor ignore the fact that after all Hamilton's argument is equally persuasive with that which he was trying to combat.

More valuable for modern consideration are certain observations which Hamilton makes when he turns to the positive side,—a demonstration of the real productivity of manufactures. These observations are worthy of special note, not only because of their continuing, present-day influence, but because of their importance in Hamilton's general position. Frequently they are returned to in his Report in support of some special or collateral argument, and they form an essential portion of his whole thesis. Moreover, they constitute for the most part original contributions by Hamilton. They may be stated as follows:

1. Manufactures promote a greater division of labor than agriculture, and "there is scarcely anything of greater moment in the economy of a nation than the proper division of labor". Thereby "an increase of productive industry is assured".¹

2. Manufactures lead to an extension in the use of machinery, and in this way "an artificial force" is in production brought to the aid of "the natural force of man".

3. They add to the productivity of the country by giving employment to "classes of the community not originally engaged in the particular business".

4. They encourage the immigration of foreign workmen.

5. They furnish "greater scope for the diversity of talents and dispositions which discriminate men from each other". And this proposition, it may be added, grew into a distinct and notable argument for protection, commonly spoken of in Hamilton's own phrase as the "diversity of talents" argument.

6. Manufactures afford "a more ample and various field for enterprise"; and "to cherish and stimulate the activity of the human mind by multiplying the objects of enterprise is not

¹ This first contention is decidedly not original with Hamilton, but was drawn directly from Smith's *Wealth of Nations*. Indeed, Hamilton relies so largely upon Smith that, in his more detailed exposition of the advantages in the division of labor, he follows almost exactly the analysis previously made by Smith: "the greater skill and dexterity" which would naturally result, "the economy of time," and the like.

among the least considerable of the expedients by which the wealth of a nation may be promoted".

7. And, finally, the establishment of manufactures contributes to an "augmentation of the produce or revenue of the nation" through "creating, in some instances, a new, and securing in all a more certain and steady demand for the surplus produce of the soil" and here is the origin of another protective argument, the so-called "home market" plea, which in the hands of Henry C. Carey and others came to have exceptional influence in American thought.

But let us proceed with Hamilton's further analysis. Having disposed to his own satisfaction of the general question of productiveness or unproductiveness in manufactures, he turns to the more immediate problem of whether or not manufactures should be encouraged in the United States. Here at once the influence of Adam Smith again becomes apparent. Hamilton appears to accept, at least provisionally, the line of reasoning presented by the former concerning the broad validity of a laissez-faire policy. "If the system of perfect liberty to industry and commerce were the prevailing system of nations, the arguments which dissuade a country in the predicament of the United States from the zealous pursuit of manufactures would, doubtless, have great force"; and the persuasive factor in Hamilton's mind is the system of hindrances already existent which confronted the nation in its export trade. In brief, expediency controls Hamilton's decision, not theoretical soundness. Anticipating Cleveland by a hundred years, he contends that "a situation, not a theory", confronts the nation.

Shortly after, however, Hamilton seems to change his emphasis. When he is directly confronted with the proposition of thoroughgoing laissez-faire that "industry, if left to itself, will naturally find its way to the most useful and profitable employment", he makes a more positive reply. Now he finds that "the strong influence of habit", "the fear of want of success in untried enterprises", and similar forces may just as "naturally" prevent the development of manufactures, whatever be the suitability of the country for such an advance. This argument, too, it may be noted, is almost altogether original with Hamilton, and, receiving a publicity, especially in the United States, through the distribution of the Report of Manufactures,

it has since produced important results. Fully developed as the "young industries argument" for protection, it forms a particularly striking part of the protective views of List, Carey, and others; has been accepted by such professional economists as Mill and Taussig (although with reservations as to its applicability); and has figured prominently in the introduction of protective duties in many countries.

In the meanwhile—though seemingly out of place in the orderly development of his thought—Hamilton has considered and met, at least to his own satisfaction, the contention that by keeping population more concentrated in the East the introduction of manufactures would lead to a retardation of settlement of the country. His reply consists of two sections: in the first, he doubts the validity of such views, because of the attractive force which manufactures would have to foreign labor and because of the "home market" which manufactures would provide for agricultural products; and in the second, he asserts that even if the settlement of the empty western area were somewhat retarded, the advantages flowing from manufactures would outweigh the losses due to this delay.

Hamilton now turns to other possible objections which might be raised against the artificial stimulation of manufactures in the United States:—the prevailing scarcity of labor, the consequent dearth of that productive factor, and the scant supply of capital. He believes that these difficulties can be overcome by the development of unused capacities within the country itself or by the aid of labor and capital drawn from abroad. Interesting by reason of their contrast with most modern views, are his sentiments that persons ordinarily engaged in other occupations may be employed in manufactures "during the seasons or hours of leisure"; and that children as well as women may be more largely utilized in manufactures. Children, he added, could be rendered "more early useful" in manufacturing establishments "than they otherwise would be".¹

Likewise, Hamilton's treatment of capital is interesting, especially his attempt to show that government bonds "answer the purpose of capital". Some critics of Hamilton have accused him of identifying these paper evidences of debt with real capital, but this charge, it seems to me, cannot be sub-

¹ See p. 259, 269, below.

stantiated. He recognizes the difference between "an absolute increase of capital, or an accession of real wealth", and "an artificial increase of capital", i.e., government securities. He associates the latter with bank credit and "every species of private credit" as "an engine of business"; and finds therein, if indeed not "an augmentation of real wealth", at least a means whereby the real wealth of the community may be increased. From such distinctions and from the whole character of his discussion, it appears that Hamilton views government funds in somewhat the same light as we nowadays view money when we speak of it as a "store of value". The ready convertibility of the bonds give to their current possessors a means and a power of subscribing to the stock of new manufacturing enterprises, second only to the possession of actual cash. If they only would do so, government bondholders could dispose of their securities to the supposedly ever-present conservative investor, and transfer their "capital" to the new projects—just as a modern corporation with a surplus invested in government bonds or notes might sell them and buy an interest in some other corporation. In short, while no present-day economist would view the matter in just the light that Hamilton did, there is a certain plausibility to his argument, and we should be swift to overlook the portion of error contained in his propositions.

Hamilton, however, does not content himself with an argument from probabilities in his attempt to meet these particular objections to his policy of artificially stimulating manufactures. Having stated the case in theoretical terms, he turns to the very practical demonstration that his views are sound by appealing to the evidence of accomplished facts:—that manufactures of skins, iron, wood, etc., have already come into existence "with a rapidity which surprises, affording an encouraging assurance of success in future attempts". And this catalogue of past accomplishments, it may be noted, is drawn in large measure from the correspondence on existing manufactures which is published herewith.

Proceeding with his main argument, Hamilton finally considers that problem which was later to play such a large part in tariff controversies, and which is indeed of real importance today—the possible conflict of interests between classes of the "protected" community, which arises through the enhancement

of domestic prices over what would otherwise be paid for similar foreign goods. Although this is in reality but a practical aspect of the general problem of government interference, Hamilton is justified in considering the matter again with special reference to class interests. His disposition of the subject accords for the most part with that which he has already outlined in connection with his "young industries argument". Possibly prices will not be raised at all, he says; and the burden of the new duties will fall on the foreign producer, although here he appears to overlook how little actually this would benefit domestic manufactures. If prices are enhanced, he goes on to say, they will soon be driven down again, by force of internal competition, "to the minimum of a reasonable profit on the capital employed",—although here also his argument is inconclusive, since he fails to establish that the price finally attained will be as low as that at which the goods might be purchased from abroad. Despite such gaps in his reasoning, however, at least this may be said for Hamilton's treatment: that it goes fully as far as subsequent protectionists usually have gone in their consideration of the matter, and in fact concedes more to the enemy than most have been willing to do.

Therewith the Report on Manufactures concludes consideration of the general or specific objections to the encouragement of manufacturing industries. But Hamilton is not content to allow no more than purely negative virtues to his cherished policy, and he proceeds to enunciate certain positive advantages which should follow from its adoption. These are generally comprehended under the thesis that "the trade of a country which is both manufacturing and agricultural will be more lucrative and prosperous than that of a country which is merely agricultural"; and that "not only the wealth, but the independence and security of a country appear to be materially connected with the prosperity of manufactures".

There is no need to enter into a detailed examination of these views. The first depends largely upon the dubious points of the greater dependability of a "home market", and the advantages *per se* of diversified industry; although, to these factors, might well be added the further matter treated by Hamilton later as a consideration "of a more particular nature": that the burden of transportation charges falls largely upon

the country which exports agricultural products alone. (This burden of transportation, in Hamilton's view, comprises not only the charges upon the agricultural products exported, but also those upon manufactured articles imported.) Hamilton's analysis upon these points is very interesting historically, but unfortunately more fallacious in the light of modern ideas than much that had gone before. To support his views, he presents much that antedates *The Wealth of Nations*—much that is reminiscent of Mercantilism rather than of the teachings of Adam Smith. Apparently Hamilton has confidence in the value of a "favorable balance of trade" and holds to the belief that there is an intimate relationship between "pecuniary wealth or money" and actual prosperity of a country. Since these fallacies persist even to the present day in some localities, although their untruth has been exhibited repeatedly in sound economic writings, perhaps one should not judge too harshly the hesitant doubts of Hamilton in a world but recently shown the error of its ways. Much less may one condemn unsympathetically his analysis of the incidence of transportation charges, although in this case also subsequent development of the theory of international trade has given another answer to the problem there raised, i.e., the answer that, other things being equal, the burden will be divided between trading nations in accordance with their reciprocal demands for each other's products.

Even less need be said concerning the second general argument above noted. The notion that every nation with a view to independence and security "ought to endeavor to possess within itself all the essentials of national supply, . . . subsistence, habitation, clothing, and defense" has been approved in greater or less degree by nearly every protectionist writer, and has been admitted by economists as the most important non-economic argument in the protectionist's arsenal. This "nationalistic" or "military" argument, however, is emphasized less strongly by Hamilton than by many of his successors in the advocacy of protection, and it plays no essential part in his system. Possibly the position of relative importance in which he places this argument may be explained by the futility in his eyes of the hope of any appreciable self-dependence in the

United States for the years immediately ahead. Hamilton is too practical to expect the miraculous.

After brief consideration of the reasons why encouragements to manufactures might at once be extended and not delayed, Hamilton turns to the final topic that is of particular interest here—and, indeed, the topic which holds the final place in the general thesis of his Report—just preceding his examination of the special industries. He now feels that he has adequately defended his chosen policy and that there remains but a discussion of the means to be adopted to the furtherance thereof. Protecting duties, prohibitive duties, prohibitions on the export of raw materials, bounties, premiums, etc., are all scrutinized with care, and the advantages and disadvantages of each weighed in the balance. Oddly enough, especially in view of the frequency with which Hamilton's name has been called upon to justify a protective tariff, he finds protective duties less desirable than a system of "pecuniary bounties". The latter "specie of encouragement" is more positive in its action, avoids the inconvenience of a temporary enhancement of prices and the creation of a scarcity, and may be used frequently to reconcile the divergent interests of the raw-material producer and the manufacturer.

Taken all in all, the Report of Manufactures richly deserves the place that it has had in the politico-economic writings of this country. It is a complete document, presenting the bases on which encouragement to domestic manufactures were to be advocated at the time of its composition, meeting the various objections that might be raised against any such policy, prescribing the means that should be adopted for its introduction, and finally suggesting the particular industries to which it might most successfully be applied. Moreover, the Report is formulated with a judicious moderation, with a cogency of reasoning, and with a steadiness of purpose such as few subsequent papers on the same subject have possessed. One cannot peruse it without feeling the power of Hamilton's mind; and, when the lack of guiding lights for his novel excursion into this field of economic analysis is taken into account, one cannot fail to appreciate the brilliancy of his accomplishment. If testimony were needed of the latter, it can readily be found in the degree to which latter protagonists of the protectionist

policy—List, Carey, and even more modern writers—have dipped into the pages of the Report on Manufactures, and at times paraded their findings as something particularly new. Indeed, so pervasive has been the influence of this document, at least in this country, that no one should pretend to an acquaintance with our protectionist literature who has not read and studied the Report with the attention which it unquestionably deserves.

Alexander Hamilton's Report
on the Subject of Manufactures

The Secretary of the Treasury in obedience to the order of the House of Representatives of the fifteenth day of January 1790. has applied his attention, at as early a period as his other duties would permit, to the subject of Manufactures, and particularly to the means of promoting such as will render the United States, independent on foreign nations for military and other essential supplies.

The expediency of encouraging manufactures in the United States, though not long since deemed very questionable, appears at this time to be pretty generally admitted. The embarrassments, which have obstructed the progress of our foreign trade, have led to serious reflections on the necessity of enlarging the sphere of our domestic commerce, and the success which has attended ~~in certain~~ manufacturing enterprise, in cultivating some valuable branches, has evinced that greater and more numerous success might result to be diffused of ~~the~~ obstacles to the extension of these species of industry are not so formidable as they have been apprehended to be.

There are nevertheless just notions of opinions unfavourable to the encouragement of manufactures. The arguments which support these opinions are of the following nature.---

In every country Agriculture is the most beneficial and productive object of human

FIRST PAGE IN AN EARLY DRAFT OF THE REPORT ON MANUFACTURES

(The manuscripts of two drafts of the Report on Manufactures are preserved in the Hamilton Papers at the Library of Congress in Washington. The first, from which the above photograph of the opening page was taken, is in Hamilton's own hand-writing. It appears to be an early, possibly a first draft, and in substance bears only a distant resemblance to the final Report. The second document, on the other hand, written in the even penmanship of a clerk, differs but little beyond paragraphing and punctuation from the final fruit of Hamilton's labors as the latter appears in *American State Papers, Finance*.)

Report on the Subject of Manufactures

The SECRETARY of the TREASURY, in obedience to the Order of the HOUSE of REPRESENTATIVES, of the 15th day of January, 1790, has applied his attention, at as early a period as his other duties would permit, to the subject of MANUFACTURES; and particularly to the Means of promoting such as will tend to render the UNITED STATES independent on foreign nations, for Military and other essential Supplies;

And he thereupon Respectfully submits the following

REPORT:

THE expediency of encouraging manufactures in the United States, which was not long since deemed very questionable, appears at this time to be pretty generally admitted. The embarrassments which have obstructed the progress of our external trade, have led to serious reflections on the necessity of enlarging the sphere of our domestic commerce. The restrictive regulations, which, in foreign markets, abridge the vent of the increasing surplus of our agricultural produce, serve to beget an earnest desire, that a more extensive demand for that surplus may be created at home; and the complete success which has rewarded manufacturing enterprise, in some valuable branches, conspiring with the promising symptoms which attend some less mature essays in others, justify a hope, that the obstacles to the growth of this species of industry are less formidable than they were apprehended to be; and that it is not difficult to find, in its further extension, a full indemnification for any external disadvantages, which are or may be experienced, as well as an accession of resources, favorable to national independence and safety.

There still are, nevertheless, respectable patrons of opinions unfriendly to the encouragement of manufactures. The following are, substantially, the arguments by which these opinions are defended.

“In every country, (say those who entertain them) agriculture is the most beneficial and productive object of human industry. This position, generally, if not universally true, applies with peculiar emphasis to the United States, on account of their immense tracts of fertile territory, uninhabited and unimproved. Nothing can afford so advantageous an employment for capital and labor, as the conversion of this extensive wilderness into cultivated farms. Nothing, equally with this, can contribute to the population, strength, and real riches of the country.

“To endeavor, by the extraordinary patronage of government, to accelerate the growth of manufactures, is, in fact, to endeavor, by

force and art, to transfer the natural current of industry from a more to a less beneficial channel. Whatever has such a tendency, must necessarily be unwise; indeed, it can hardly ever be wise in a government to attempt to give a direction to the industry of its citizens. This, under the quicksighted guidance of private interest, will, if left to itself, infallibly find its own way to the most profitable employment; and it is by such employment, that the public prosperity will be most effectually promoted. To leave industry to itself, therefore, is, in almost every case, the soundest as well as the simplest policy.

"This policy is not only recommended to the United States, by considerations which affect all nations; it is, in a manner, dictated to them by the imperious force of a very peculiar situation. The smallness of their population compared with their territory; the constant allurements to emigration from the settled to the unsettled parts of the country; the facility with which the less independent condition of an artisan can be exchanged for the more independent condition of a farmer; these, and similar causes, conspire to produce, and, for a length of time, must continue to occasion, a scarcity of hands for manufacturing occupation, and dearness of labor generally. To these disadvantages for the prosecution of manufactures, a deficiency of pecuniary capital being added, the prospect of a successful competition with the manufactures of Europe, must be regarded as little less than desperate. Extensive manufactures can only be the offspring of a redundant, at least of a full population. Till the latter shall characterize the situation of this country, 'tis fain to hope for the former.

"If, contrary to the natural course of things, an unseasonable and premature spring can be given to certain fabrics, by heavy duties, prohibitions, bounties, or by other forced expedients, this will only be to sacrifice the interests of the community to those of particular classes. Besides the misdirection of labor, a virtual monopoly will be given to the persons employed on such fabrics; and an enhancement of price, the inevitable consequence of every monopoly, must be defrayed at the expense of the other parts of society. It is far preferable, that those persons should be engaged in the cultivation of the earth, and that we should procure, in exchange for its productions, the commodities with which foreigners are able to supply us in greater perfection, and upon better terms."

This mode of reasoning is founded upon facts and principles which have certainly respectable pretensions. If it had governed the conduct of nations more generally than it has done, there is room to suppose that it might have carried them faster to prosperity and greatness than they have attained by the pursuit of maxims too widely opposite. Most general theories, however, admit of numerous exceptions, and

there are few, if any, of the political kind, which do not blend a considerable portion of error with the truths they inculcate.

In order to an accurate judgment how far that which has been just stated ought to be deemed liable to a similar imputation, it is necessary to advert carefully to the considerations which plead in favor of manufactures, and which appear to recommend the special and positive encouragement of them in certain cases, and under certain reasonable limitations.

It ought readily to be conceded that the cultivation of the earth, as the primary and most certain source of national supply; as the immediate and chief source of subsistence to man; as the principal source of those materials which constitute the nutriment of other kinds of labor; as including a state most favorable to the freedom and independence of the human mind—one, perhaps, most conducive to the multiplication of the human species; has intrinsically a strong claim to pre-eminence over every other kind of industry.

But, that it has a title to anything like an exclusive predilection, in any country, ought to be admitted with great caution; that it is even more productive than every other branch of industry, requires more evidence than has yet been given in support of the position. That its real interests, precious and important as, without the help of exaggeration, they truly are, will be advanced, rather than injured, by the due encouragement of manufactures, may, it is believed, be satisfactorily demonstrated. And it is also believed, that the expediency of such encouragement, in a general view, may be shown to be recommended by the most cogent and persuasive motives of national policy.

It has been maintained, that agriculture is not only the most productive, but the only productive, species of industry. The reality of this suggestion, in other respects, has, however, not been verified by any accurate detail of facts and calculations; and the general arguments which are adduced to prove it, are rather subtle and paradoxical, than solid or convincing.

Those which maintain its exclusive productiveness, are to this effect:—

Labor bestowed upon the cultivation of land, produces enough, not only to replace all the necessary expenses incurred in the business, and to maintain the persons who are employed in it, but to afford, together with the ordinary profit on the stock or capital of the farmer, a nett surplus or rent for the landlord or proprietor of the soil. But the labor of artificers does nothing more than replace the stock which employs them, (or which furnishes materials, tools, and wages,) and yields the ordinary profit upon that stock. It yields nothing equiva-

lent to the rent of land; neither does it add anything to the total value of the whole annual produce of the land and labor of the country. The additional value given to those parts of the produce of land, which are wrought into manufactures, is counterbalanced by the value of those other parts of that produce which are consumed by the manufacturers. It can, therefore, only be by saving or parsimony, not by the positive productiveness of their labor, that the classes of artificers can, in any degree, augment the revenue of the society.

To this it has been answered:

1. "That, inasmuch as it is acknowledged that manufacturing labor re-produces a value equal to that which is expended or consumed in carrying it on, and continues in existence the original stock or capital employed, it ought, on that account, alone, to escape being considered as wholly unproductive. That, though it should be admitted, as alleged, that the consumption of the product of the soil, by the classes of artificers or manufacturers, is exactly equal to the value added by their labor to the materials upon which it is exerted, yet, it would not thence follow, that it added nothing to the revenue of the society, or to the aggregate value of the annual produce of its land and labor. If the consumption, for any given period, amounted to a given sum, and the increased value of the produce manufactured, in the same period, to a like sum, the total amount of the consumption and production, during that period, would be equal to the two sums, and consequently double the value of the agricultural produce consumed; and, though the increment of value produced by the classes of artificers should, at no time, exceed the value of the produce of the land consumed by them, yet, there would be, at every moment, in consequence of their labor, a greater value of goods in the market than would exist independent of it."

2. "That the position, that artificers can augment the revenue of a society only by parsimony, is true in no other sense than in one which is equally applicable to husbandmen or cultivators. It may be alike affirmed of all these classes, that the fund acquired by their labor, and destined for their support, is not, in an ordinary way, more than equal to it. And hence, it will follow, that augmentations of the wealth or capital of the community, (except in the instances of some extraordinary dexterity or skill) can only proceed, with respect to any of them, from the savings of the more thrifty and parsimonious."

3. "That the annual produce of the land and labor of a country can only be increased in two ways—by some improvement in the productive powers of the useful labor which actually exists within it, or by some increase in the quantity of such labor. That, with regard to the first, the labor of artificers being capable of greater

subdivision and simplicity of operation than that of cultivators, it is susceptible, in a proportionably greater degree of improvement in its productive powers, whether to be derived from an accession of skill or from the application of ingenious machinery: in which particular, therefore, the labor employed in the culture of land can pretend to no advantage over that engaged in manufactures. That, with regard to an augmentation of the quantity of useful labor, this, excluding adventitious circumstances, must depend essentially upon an increase of capital, which again must depend upon the savings made out of the revenues of those who furnish or manage that which is at any time employed, whether in agriculture or in manufactures, or in any other way."

But, while the exclusive productiveness of agricultural labor has been thus denied and refuted, the superiority of its productiveness has been conceded without hesitation. As this concession involves a point of considerable magnitude, in relation to maxims of public administration, the grounds on which it rests are worthy of a distinct and particular examination.

One of the arguments made use of in support of the idea, may be pronounced both quaint and superficial. It amounts to this: That, in the productions of the soil, nature co-operates with man; and that the effect of their joint labor must be greater than that of the labor of man alone.

This, however, is far from being a necessary inference. It is very conceivable, that the labor of man alone, laid out upon a work requiring great skill and art to bring it to perfection, may be more productive, in value, than the labor of nature and man combined, when directed toward more simple operations and objects; and when it is recollected to what an extent the agency of nature, in the application of the mechanical powers, is made auxiliary to the prosecution of manufactures, the suggestion which has been noticed loses even the appearance of plausibility.

It might also be observed, with a contrary view, that the labor employed in agriculture, is, in a great measure, periodical and occasional, depending on seasons, and liable to various and long intermissions; while that occupied in many manufactures is constant and regular, extending through the year, embracing, in some instances, night as well as day. It is also probable that there are, among the cultivators of land, more examples of remissness than among artificers. The farmer, from the peculiar fertility of his land, or some other favorable circumstance, may frequently obtain a livelihood, even with a considerable degree of carelessness in the mode of cultivation; but the artisan can with difficulty effect the

same object, without exerting himself pretty equally with all those who are engaged in the same pursuit. And if it may likewise be assumed as a fact, that manufactures open a wider field to exertions of ingenuity than agriculture, it would not be a strained conjecture, that the labor employed in the former, being at once more constant, more uniform, and more ingenious, than that which is employed in the latter, will be found, at the same time, more productive.

But it is not meant to lay stress on observations of this nature; they ought only to serve as a counterbalance to those of a similar complexion. Circumstances so vague and general, as well as so abstract, can afford little instruction in a matter of this kind.

Another, and that which seems to be the principal argument offered for the superior productiveness of agricultural labor, turns upon the allegation, that labor employed upon manufactures, yields nothing equivalent to the rent of the land; or to that nett surplus, as it is called, which accrues to the proprietor of the soil.

But this distinction, important as it has been deemed, appears rather verbal than substantial.

It is easily discernible that, what, in the first instance, is divided into two parts, under the denominations of the ordinary profit of the stock of the farmer and rent to the landlord, is, in the second instance, united under the general appellation of the ordinary profit on the stock of the undertaker; and that this formal or verbal distribution constitutes the whole difference in the two cases. It seems to have been overlooked, that the land is itself a stock or capital, advanced or lent by its owner to the occupier or tenant, and that the rent he receives is only the ordinary profit of a certain stock in land, not managed by the proprietor himself, but by another, to whom he lends or lets it, and who, on his part, advances a second capital, to stock and improve the land, upon which he also receives the usual profit. The rent of the landlord and the profit of the farmer are, therefore, nothing more than the ordinary profits of two capitals belonging to two different persons, and united in the cultivation of a farm: as, in the other case, the surplus which arises upon any manufactory, after replacing the expenses of carrying it on, answers to the ordinary profits of one or more capitals engaged in the prosecution of such manufactory. It is said one or more capitals, because, in fact the same thing which is contemplated in the case of the farm, sometimes happens in that of a manufactory. There is one, who furnishes a part of the capital or lends a part of the money by which it is carried on, and another, who carries it on with an addition of his own capital. Out of the surplus which remains after defraying expenses, an interest is paid to the money-lender, for the portion of

the capital furnished by him, which exactly agrees with the rent paid to the landlord; and the residue of that surplus constitutes the profit of the undertaker or manufacturer, and agrees with what is denominated the ordinary profits on the stock of the farmer. Both together, make the ordinary profits of two capitals employed in a manufactory; as, in the other case, the rent of the landlord and the revenue of the farmer compose the ordinary profits of two capitals employed in the cultivation of a farm.

The rent, therefore, accruing to the proprietor of the land, far from being a criterion of exclusive productiveness, as has been argued, is no criterion even of superior productiveness. The question must still be, whether the surplus, after defraying expenses of a given capital, employed in the purchase and improvement of a piece of land, is greater or less than that of a like capital, employed in the prosecution of a manufactory; or whether the whole value produced from a given capital and a given quantity of labor, employed in one way, be greater or less than the whole value produced from an equal capital and an equal quantity of labor, employed in the other way; or rather, perhaps, whether the business of agriculture, or that of manufactures, will yield the greatest product, according to the compound ratio of the quantity of the capital, and the quantity of labor, which are employed in the one or in the other.

The solution of either of these questions is not easy; it involves numerous and complicated details, depending on an accurate knowledge of the objects to be compared. It is not known that the comparison has ever yet been made upon sufficient data, properly ascertained and analyzed. To be able to make it on the present occasion, with satisfactory precision, would demand more previous inquiry and investigation, than there has been hitherto either leisure or opportunity to accomplish.

Some essays, however, have been made toward acquiring the requisite information; which have rather served to throw doubt upon, than to confirm the hypothesis under examination. But it ought to be acknowledged, that they have been too little diversified, and are too imperfect to authorize a definite conclusion either way; leading rather to probable conjecture than to certain deduction. They render it probable, that there are various branches of manufactures, in which a given capital will yield a greater total product, and a considerably greater nett product, than an equal capital invested in the purchase and improvement of lands; and that there are also some branches, in which both the gross and the nett produce will exceed that of agricultural industry, according to a compound ratio of capital and labor. But it is on this last point that there appears to be the greatest

room for doubt. It is far less difficult to infer generally, that the net produce of capital engaged in manufacturing enterprises is greater than that of capital engaged in agriculture:

The foregoing suggestions are not designed to inculcate an opinion that manufacturing industry is more productive than that of agriculture. They are intended rather to show that the reverse of this proposition is not ascertained; that the general arguments, which are brought to establish it, are not satisfactory; and consequently, that a supposition of the superior productiveness of tillage ought to be no obstacle to listening to any substantial inducements to the encouragement of manufactures, which may be otherwise perceived to exist, through an apprehension that they may have a tendency to divert labor from a more to a less profitable employment.

It is extremely probable, that, on a full and accurate development of the matter, on the ground of fact and calculation, it would be discovered that there is no material difference between the aggregate productiveness of the one, and of the other kind of industry; and that the propriety of the encouragements, which may, in any case, be proposed to be given to either, ought to be determined upon considerations irrelative to any comparison of that nature.

II. But without contending for the superior productiveness of manufacturing industry, it may conduce to a better judgment of the policy which ought to be pursued respecting its encouragement, to contemplate the subject under some additional aspects, tending not only to confirm the idea that this kind of industry has been improperly represented as unproductive in itself, but to evince, in addition, that the establishment and diffusion of manufactures have the effect of rendering the total mass of useful and productive labor, in a community, greater than it would otherwise be. In prosecuting this discussion, it may be necessary briefly to resume and review some of the topics which have been already touched.

To affirm that the labor of the manufacturer is unproductive, because he consumes as much of the produce of land as he adds value to the raw material which he manufactures, is not better founded, than it would be to affirm that the labor of the farmer, which furnishes materials to the manufacturer, is unproductive, because he consumes an equal value of manufactured articles. Each furnishes a certain portion of the produce of his labor to the other, and each destroys a correspondent portion of the produce of the labor of the other. In the mean time, the maintenance of two citizens, instead of one, is going on; the State has two members instead of one; and they, together, consume twice the value of what is produced from the land.

If, instead of a farmer and artificer, there were a farmer only, he would be under the necessity of devoting a part of his labor to the fabrication of clothing, and other articles, which he would procure of the artificer, in the case of there being such a person; and of course he would be able to devote less labor to the cultivation of his farm, and would draw from it a proportionably less product. The whole quantity of production, in this state of things, in provisions, raw materials, and manufactures, would certainly not exceed in value the amount of what would be produced in provisions and raw materials only, if there were an artificer as well as a farmer.

Again, if there were both an artificer and a farmer, the latter would be left at liberty to pursue exclusively the cultivation of his farm. A greater quantity of provisions and raw materials would, of course, be produced, equal, at least, as has been already observed, to the whole amount of the provisions, raw materials, and manufactures, which would exist in a contrary supposition. The artificer, at the same time, would be going on in the production of manufactured commodities, to an amount sufficient, not only to repay the farmer, in those commodities, for the provisions and materials which were procured from him, but to furnish the artificer himself, with a supply of similar commodities for his own use. Thus, then, there would be two quantities or values in existence, instead of one; and the revenue and consumption would be double, in one case, what it would be in the other.

If, in the place of both of these suppositions, there were supposed to be two farmers and no artificer, each of whom applied a part of his labor to the culture of land, and another part to the fabrication of manufactures; in this case, the portion of the labor of both bestowed, upon land, would produce the same quantity of provisions and raw materials only, as would be produced by the entire sum of the labor of one, applied in the same manner; and the portion of the labor of both, bestowed upon manufactures, would produce the same quantity of manufactures only, as would be produced by the entire sum of the labor of one, applied in the same manner. Hence, the produce of the labor of the two farmers would not be greater than the produce of the labor of the farmer and artificer; and hence it results, that the labor of the artificer is as positively productive as that of the farmer, and as positively augments the revenue of the society.

The labor of the artificer replaces to the farmer that portion of his labor with which he provides the materials of exchange with the artificer, and which he would otherwise have been compelled to apply to manufactures; and while the artificer thus enables the farmer to enlarge his stock of agricultural industry, a portion of which he pur-

chases for his own use, he also supplies himself with the manufactured articles, of which he stands in need. He does still more. Besides this equivalent, which he gives for the portion of agricultural labor consumed by him, and this supply of manufactured commodities for his own consumption, he furnishes still a surplus, which compensates for the use of the capital advanced, either by himself or some other person, for carrying on the business. This is the ordinary profit of the stock employed in the manufactory, and is, in every sense, as effective an addition to the income of the society as the rent of land.

↳ The produce of the labor of the artificer, consequently, may be regarded as composed of three parts; one, by which the provisions for his subsistence and the materials for his work, are purchased of the farmer; one, by which he supplies himself with manufactured necessities; and a third, which constitutes the profit on the stock employed. The two last portions seem to have been overlooked, in the system which represents manufacturing industry as barren and unproductive.

In the course of the preceding illustrations, the products of equal quantities of the labor of the farmer and artificer have been treated as if equal to each other. But this is not to be understood as intending to assert any such precise equality. It is merely a manner of expression, adopted for the sake of simplicity and perspicuity. Whether the value of the produce of the labor of the farmer be somewhat more or less than that of the artificer, is not material to the main scope of the argument, which, hitherto, has only aimed at showing, that the one, as well as the other, occasions a positive augmentation of the total produce and revenue of the society.

It is now proper to proceed a step further, and to enumerate the principal circumstances from which it may be inferred that manufacturing establishments not only occasion a positive augmentation of the produce and revenue of the society, but that they contribute essentially to rendering them greater than they could possibly be, without such establishments. These circumstances are:

1. The division of labor.
2. An extension of the use of machinery.
3. Additional employment to classes of the community not ordinarily engaged in the business.
4. The promoting of emigration from foreign countries.
5. The furnishing greater scope for the diversity of talents and dispositions, which discriminate men from each other.
6. The affording a more ample and various field for enterprise.
7. The creating, in some instances, a new, and securing, in all, a more certain and steady demand for the surplus produce of the soil.

Each of these circumstances has a considerable influence upon the total mass of industrious effort in a community; together, they add to it a degree of energy and effect, which are not easily conceived. Some comments upon each of them, in the order in which they have been stated, may serve to explain their importance.

I. As to the division of labor.

It has justly been observed, that there is scarcely any thing of greater moment in the economy of a nation, than the proper division of labor. The separation of occupations, causes each to be carried to a much greater perfection, than it could possibly acquire if they were blended. This arises principally from three circumstances:

1st. The greater skill and dexterity naturally resulting from a constant and undivided application to a single object. It is evident that these properties must increase in proportion to the separation and simplification of objects, and the steadiness of the attention devoted to each; and must be less in proportion to the complication of objects, and the number among which the attention is distracted.

2d. The economy of time, by avoiding the loss of it, incident to a frequent transition from one operation to another of a different nature. This depends on various circumstances; the transition itself, the orderly disposition of the implements, machines, and materials, employed in the operation to be relinquished, the preparatory steps to the commencement of a new one, the interruption of the impulse, which the mind of a workman acquires, from being engaged in a particular operation, the distractions, hesitations, and reluctances, which attend the passage from one kind of business to another.

3d. An extension of the use of machinery. A man occupied on a single object will have it more in his power, and will be more naturally led to exert his imagination, in devising methods to facilitate and abridge labor, than if he were perplexed by a variety of independent and dissimilar operations. Besides this, the fabrication of machines, in numerous instances, becoming itself a distinct trade, the artist who follows it has all the advantages which have been enumerated, for improvement in his particular art; and, in both ways, the invention and application of machinery are extended.

And from these causes united, the mere separation of the occupation of the cultivator from that of the artificer, has the effect of augmenting the productive powers of labor, and with them, the total mass of the produce or revenue of a country. In this single view of the subject, therefore, the utility of artificers or manufacturers, towards promoting an increase of productive industry, is apparent.

2. *As to an extension of the use of machinery, a point which, though partly anticipated, requires to be placed in one or two additional lights.*

The employment of machinery forms an item of great importance in the general mass of national industry. It is an artificial force brought in aid of the natural force of man; and, to all the purposes of labor, is an increase of hands, an accession of strength, unencumbered too by the expense of maintaining the laborer. May it not, therefore, be fairly inferred, that those occupations which give the greatest scope to the use of this auxiliary, contribute most to the general stock of industrious effort, and, in consequence, to the general product of industry?

It shall be taken for granted, and the truth of the position referred to observation, that manufacturing pursuits are susceptible, in a greater degree, of the application of machinery, than those of agriculture. If so, all the difference is lost to a community, which, instead of manufacturing for itself, procures the fabrics requisite to its supply, from other countries. The substitution of foreign for domestic manufactures, is a transfer to foreign nations, of the advantages accruing from the employment of machinery, in the modes in which it is capable of being employed, with most utility and to the greatest extent.

The cotton-mill, invented in England, within the last twenty years, is a signal illustration of the general proposition which has been just advanced. In consequence of it, all the different processes for spinning cotton, are performed by means of machines, which are put in motion by water, and attended chiefly by women and children; and by a smaller number of persons, in the whole, than are requisite in the ordinary mode of spinning. And it is an advantage of great moment, that the operations of this mill continue with convenience, during the night as well as through the day. The prodigious effect of such a machine is easily conceived. To this invention is to be attributed, essentially, the immense progress which has been so suddenly made in Great Britain, in the various fabrics of cotton.

3. *As to the additional employment of classes of the community not originally engaged in the particular business.*

This is not among the least valuable of the means, by which manufacturing institutions contribute to augment the general stock of industry and production. In places where these institutions prevail, besides the persons regularly engaged in them, they afford occasional and extra employment to industrious individuals and families, who

are willing to devote the leisure resulting from the intermissions of their ordinary pursuits to collateral labors, as a resource for multiplying their acquisitions or their enjoyments. The husbandman himself experiences a new source of profit and support, from the increased industry of his wife and daughters, invited and stimulated by the demands of the neighboring manufactories.

Besides this advantage of occasional employment to classes having different occupations, there is another, of a nature allied to it, and of a similar tendency. This is the employment of persons who would otherwise be idle, and in many cases, a burthen on the community, either from the bias of temper, habit, infirmity of body, or some other cause, indisposing or disqualifying them for the toils of the country. It is worthy of particular remark that in general, women and children are rendered more useful, and the latter more early useful, by manufacturing establishments, than they would otherwise be. Of the number of persons employed in the cotton manufactories of Great Britain, it is computed that four-sevenths, nearly, are women and children; of whom the greatest proportion are children, and many of them of a tender age.

And thus it appears to be one of the attributes of manufactures, and one of no small consequence, to give occasion to the exertion of a greater quantity of industry, even by the same number of persons, where they happen to prevail, than would exist if there were no such establishments.

4. As to the promoting of emigration from foreign countries.

Men reluctantly quit one course of occupation and livelihood for another, unless invited to it by very apparent and proximate advantages. Many who would go from one country to another, if they had a prospect of continuing with more benefit the callings to which they have been educated, will often not be tempted to change their situation by the hope of doing better in some other way. Manufacturers who, listening to the powerful invitations of a better price for their fabrics, or their labor, of greater cheapness of provisions and raw materials, of an exemption from the chief part of the taxes, burthens, and restraints, which they endure in the old world, of greater personal independence and consequence, under the operation of a more equal government, and of what is far more precious than mere religious toleration, a perfect equality of religious privileges, would probably flock from Europe to the United States, to pursue their own trades or professions, if they were once made sensible of the advantages they

would enjoy, and were inspired with an assurance of encouragement and employment, will, with difficulty, be induced to transplant themselves, with a view to becoming cultivators of land.

If it be true, then, that it is the interest of the United States to open every possible avenue to emigration from abroad, it affords a weighty argument for the encouragement of manufactures; which, for the reasons just assigned, will have the strongest tendency to multiply the inducements to it.

Here is perceived an important resource, not only for extending the population, and with it the useful and productive labor of the country, but likewise for the prosecution of manufactures, without deducting from the number of hands, which might otherwise be drawn to tillage; and even for the indemnification of agriculture, for such as might happen to be diverted from it. Many, whom manufacturing views would induce to emigrate, would, afterwards, yield to the temptations which the particular situation of this country holds out to agricultural pursuits. And while agriculture would, in other respects, derive many signal and unmingled advantages from the growth of manufactures, it is a problem whether it would gain or lose, as to the article of the number of persons employed in carrying it on.

5. *As to the furnishing greater scope for the diversity of talents and dispositions, which discriminate men from each other.*

This is a much more powerful mean of augmenting the fund of national industry, than may at first sight appear. It is a just observation, that minds of the strongest and most active powers for their proper objects, fall below mediocrity, and labor without effect, if confined to uncongenial pursuits. And it is thence to be inferred, that the results of human exertion may be immensely increased by diversifying its objects. When all the different kinds of industry obtain in a community, each individual can find his proper element, and can call into activity, the whole vigor of his nature. And the community is benefitted by the services of its respective members, in the manner in which each can serve it with most effect.

If there be anything in a remark often to be met with, namely, that there is, in the genius of the people of this country, a peculiar aptitude for mechanic improvements, it would operate as a forcible reason for giving opportunities to the exercise of that species of talent, by the propagation of manufactures.

6. *As to the affording a more ample and various field
for enterprise.*

This also is of greater consequence in the general scale of national exertion, than might, perhaps, on a superficial view be supposed, and has effects not altogether dissimilar from those of the circumstances last noticed. To cherish and stimulate the activity of the human mind, by multiplying the objects of enterprise, is not among the least considerable of the expedients by which the wealth of a nation may be promoted. Even things in themselves not positively advantageous, sometimes become so, by their tendency to provoke exertion. Every new scene which is opened to the busy nature of man to rouse and exert itself, is the addition of a new energy to the general stock of effort.

The spirit of enterprise, useful and prolific as it is, must necessarily be contracted or expanded, in proportion to the simplicity or variety of the occupations and productions which are to be found in a society. It must be less in a nation of mere cultivators, than in a nation of cultivators and merchants; less in a nation of cultivators and merchants, than in a nation of cultivators, artificers, and merchants.

7. *As to the creating, in some instances, a new, and securing,
in all, a more certain and steady demand, for the
surplus produce of the soil*

This is among the most important of the circumstances which have been indicated. It is a principal mean by which the establishment of manufactures contributes to an augmentation of the produce or revenue of a country, and has an immediate and direct relation to the prosperity of agriculture.

It is evident, that the exertions of the husbandman will be steady or fluctuating, vigorous or feeble, in proportion to the steadiness or fluctuation, adequateness or inadequateness of the markets on which he must depend, for the vent of the surplus which may be produced by his labor; and that such surplus, in the ordinary course of things, will be greater or less in the same proportion.

For the purpose of this vent, a domestic market is greatly to be preferred to a foreign one; because it is, in the nature of things, far more to be relied upon.

It is a primary object of the policy of nations, to be able to supply themselves with subsistence from their own soils; and manufacturing nations, as far as circumstances permit, endeavor to procure from the same source, the raw materials necessary for their own fabrics. This disposition, urged by the spirit of monopoly, is sometimes even carried to an injudicious extreme. It seems not always to be recol-

lected, that nations, who have neither mines nor manufactures, can only obtain the manufactured articles of which they stand in need, by an exchange of the products of their soils; and that, if those who can best furnish them with such articles, are unwilling to give a due course to this exchange, they must, of necessity, make every possible effort to manufacture for themselves; the effect of which is, that the manufacturing nations abridge the natural advantages of their situation, through an unwillingness to permit the agricultural countries to enjoy the advantages of theirs, and sacrifice the interests of a mutually beneficial intercourse to the vain project of selling every thing and buying nothing.

But it is also a consequence of the policy which has been noted, that the foreign demand for the products of agricultural countries is, in a great degree, rather casual and occasional, than certain or constant. To what extent injurious interruptions of the demand for some of the staple commodities of the United States may have been experienced from that cause, must be referred to the judgment of those who are engaged in carrying on the commerce of the country; but, it may be safely affirmed, that such interruptions are, at times, very inconveniently felt, and that cases not unfrequently occur, in which the markets are so confined and restricted, as to render the demand very unequal to the supply.

Independently, likewise, of the artificial impediments which are created by the policy in question, there are natural causes tending to render the external demand for the surplus of agricultural nations a precarious reliance. The difference of seasons in the countries which are the consumers, make immense differences in the produce of their own soils, in different years; and consequently in the degrees of their necessity for foreign supply. Plentiful harvests with them, especially if similar ones occur at the same time in the countries which are the furnishers, occasion, of course, a glut in the markets of the latter.

Considering how fast, and how much the progress of new settlements, in the United States, must increase the surplus produce of the soil, and weighing seriously the tendency of the system which prevails amongst most of the commercial nations of Europe; whatever dependence may be placed on the force of natural circumstances to counteract the effects of an artificial policy, there appear strong reasons to regard the foreign demand for that surplus, as too uncertain a reliance, and to desire a substitute for it in an extensive domestic market.

To secure such a market there is no other expedient than to promote manufacturing establishments. Manufacturers, who constitute the most numerous class, after the cultivators of land, are for that reason the principal consumers of the surplus of their labor.

This idea of an extensive domestic market for the surplus produce of the soil, is of the first consequence. It is, of all things, that which most effectually conduces to a flourishing state of agriculture. If the effect of manufactories should be to detach a portion of the hands which would otherwise be engaged in tillage, it might possibly cause a smaller quantity of lands to be under cultivation; but, by their tendency to procure a more certain demand for the surplus produce of the soil, they would, at the same time, cause the lands which were in cultivation to be better improved and more productive. And while, by their influence, the condition of each individual farmer would be meliorated, the total mass of agricultural production would probably be increased. For this must evidently depend as much upon the degree of improvement, if not more, than upon the number of acres under culture.

It merits particular observation, that the multiplication of manufactories not only furnishes a market for those articles which have been accustomed to be produced in abundance in a country; but it likewise creates a demand for such as were either unknown, or produced in inconsiderable quantities. The bowels, as well as the surface of the earth, are ransacked for articles which were before neglected. Animals, plants, and minerals, acquire a utility and a value which were before unexplored.

The foregoing considerations seem sufficient to establish, as general propositions, that it is the interest of nations to diversify the industrious pursuits of the individuals who compose them. That the establishment of manufactures is calculated not only to increase the general stock of useful and productive labor, but even to improve the state of agriculture in particular; certainly to advance the interests of those who are engaged in it. There are other views that will be hereafter taken of the subject, which it is conceived will serve to confirm these inferences.

III. Previously to a further discussion of the objections to the encouragement of manufactures, which have been stated, it will be of use to see what can be said in reference to the particular situation of the United States, against the conclusions appearing to result from what has been already offered.

It may be observed, and the idea is of no inconsiderable weight, that however true it might be, that a State which, possessing large tracts of vacant and fertile territory, was, at the same time, secluded from foreign commerce, would find its interest and the interest of agriculture, in diverting a part of its population from tillage to manufactures; yet it will not follow, that the same is true of a State which, having such vacant and fertile territory, has, at the same time ample

opportunity of procuring from abroad, on good terms, all the fabrics of which it stands in need, for the supply of its inhabitants. The power of doing this, at least secures the great advantage of a division of labor, leaving the farmer free to pursue, exclusively, the culture of his land, and enabling him to procure with its products the manufactured supplies requisite either to his wants or to his enjoyments. And though it should be true that, in settled countries, the diversification of industry is conducive to an increase in the productive powers of labor, and to an augmentation of revenue and capital; yet it is scarcely conceivable that there can be anything of so solid and permanent advantage to an uncultivated and unpeopled country as to convert its wastes into cultivated and inhabited districts. If the revenue, in the mean time, should be less, the capital, in the event, must be greater.

To these observations, the following appears to be a satisfactory answer:

1st. If the system of perfect liberty to industry and commerce were the prevailing system of nations, the arguments which dissuade a country, in the predicament of the United States, from the zealous pursuit of manufactures, would doubtless have great force. It will not be affirmed that they might not be permitted, with few exceptions, to serve as a rule of national conduct. In such a state of things, each country would have the full benefit of its peculiar advantages to compensate for its deficiencies or disadvantages. If one nation were in a condition to supply manufactured articles, on better terms than another, that other might find an abundant indemnification in a superior capacity to furnish the produce of the soil. And a free exchange, mutually beneficial, of the commodities which each was able to supply, on the best terms, might be carried on between them, supporting, in full vigor, the industry of each. And though the circumstances which have been mentioned, and others which will be unfolded hereafter, render it probable that nations, merely agricultural, would not enjoy the same degree of opulence, in proportion to their numbers, as those which united manufactures with agriculture; yet the progressive improvement of the lands of the former might, in the end, atone for an inferior degree of opulence in the meantime; and in a case in which opposite considerations are pretty equally balanced, the option ought, perhaps, always to be in favor of leaving industry to its own direction.

But the system which has been mentioned, is far from characterizing the general policy of nations. The prevalent one has been regulated by an opposite spirit. The consequence of it is, that the United States are, to a certain extent, in the situation of a country precluded from

foreign commerce. They can, indeed, without difficulty, obtain from abroad the manufactured supplies of which they are in want; but they experience numerous and very injurious impediments to the emission and vent of their own commodities. Nor is this the case in reference to a single foreign nation only. The regulations of several countries, with which we have the most extensive intercourse, throw serious obstructions in the way of the principal staples of the United States.

In such a position of things, the United States cannot exchange with Europe on equal terms; and the want of reciprocity would render them the victim of a system which would induce them to confine their views to agriculture, and refrain from manufactures. A constant and increasing necessity, on their part, for the commodities of Europe, and only a partial and occasional demand for their own, in return, could not but expose them to a state of impoverishment, compared with the opulence to which their political and natural advantages authorize them to aspire.

Remarks of this kind are not made in the spirit of complaint. It is for the nations, whose regulations are alluded to, to judge for themselves, whether, by aiming at too much, they do not lose more than they gain. It is for the United States to consider by what means they can render themselves least dependent on the combinations, right or wrong, of foreign policy.

It is no small consolation, that, already, the measures which have embarrassed our trade, have accelerated internal improvements, which, upon the whole, have bettered our affairs. To diversify and extend these improvements is the surest and safest method of indemnifying ourselves for any inconveniences which those or similar measures have a tendency to beget. If Europe will not take from us the products of our soil, upon terms consistent with our interest, the natural remedy is to contract, as fast as possible, our wants of her.

2d. The conversion of their waste into cultivated lands, is certainly a point of great moment, in the political calculations of the United States. But the degree in which this may possibly be retarded, by the encouragement of manufactories, does not appear to countervail the powerful inducements to afford that encouragement.

An observation made in another place, is of a nature to have great influence upon this question. If it cannot be denied that the interests, even of agriculture, may be advanced more by having such of the lands of a State as are occupied, under good cultivation, than by having a greater quantity occupied under a much inferior cultivation; and if manufactories, for the reasons assigned, must be admitted to have a tendency to promote a more steady and vigorous cultivation

of the lands occupied, than would happen without them, it will follow that they are capable of indemnifying a country for a diminution of the progress of new settlements; and may serve to increase both the capital value, and the income of its lands, even though they should abridge the number of acres under tillage.

But it does by no means follow, that the progress of new settlements would be retarded by the extension of manufactures. The desire of being an independent proprietor of land, is founded on such strong principles in the human breast, that, where the opportunity of becoming so is as great as it is in the United States, the proportion will be small of those whose situations would otherwise lead to it, who would be diverted from it toward manufactures. And it is highly probable, as already intimated, that the accessions of foreigners, who, originally drawn over by manufacturing views, would afterward abandon them for agricultural, would be more than an equivalent for those of our own citizens who might happen to be detached from them.

The remaining objections to a particular encouragement of manufactures in the United States, now require to be examined.

One of these turns on the proposition, that industry, if left to itself, will naturally find its way to the most useful and profitable employment. Whence it is inferred, that manufactures, without the aid of government, will grow up as soon and as fast as the natural state of things and the interest of the community may require.

Against the solidity of this hypothesis, in the full latitude of the terms, very cogent reasons may be offered. These have relation to the strong influence of habit and the spirit of imitation; the fear of want of success in untried enterprises; the intrinsic difficulties incident to first essays toward a competition with those who have previously attained to perfection in the business to be attempted; the bounties, premiums, and other artificial encouragements, with which foreign nations second the exertions of their own citizens, in the branches in which they are to be rivalled.

Experience teaches, that men are often so much governed by what they are accustomed to see and practise, that the simplest and most obvious improvements, in the most ordinary occupations, are adopted with hesitation, reluctance, and by slow gradations. The spontaneous transition to new pursuits, in a community long habituated to different ones, may be expected to be attended with proportionately greater difficulty. When former occupations ceased to yield a profit adequate to the subsistence of their followers; or when there was an absolute deficiency of employment in them, owing to the superabundance of hands, changes would ensue; but these changes would

be likely to be more tardy than might consist with the interest either of individuals or of the society. In many cases they would not happen, while a bare support could be ensured by an adherence to ancient courses, though a resort to a more profitable employment might be practicable. To produce the desirable changes as early as may be expedient, may therefore require the incitement and patronage of government.

The apprehension of failing in new attempts, is, perhaps, a more serious impediment. There are dispositions apt to be attracted by the mere novelty of an undertaking; but these are not always those best calculated to give it success. To this, it is of importance that the confidence of cautious, sagacious capitalists, both citizens and foreigners, should be excited. And to inspire this description of persons with confidence, it is essential that they should be made to see in any project which is new — and for that reason alone, if for no other — precarious, the prospect of such a degree of countenance and support from government, as may be capable of overcoming the obstacles inseparable from first experiments.

The superiority antecedently enjoyed by nations who have pre-occupied and perfected a branch of industry, constitutes a more formidable obstacle than either of those which have been mentioned, to the introduction of the same branch into a country in which it did not before exist. To maintain, between the recent establishments of one country, and the long matured establishments of another country, a competition upon equal terms, both as to quality and price, is, in most cases, impracticable. The disparity, in the one, or in the other, or in both, must necessarily be so considerable, as to forbid a successful rivalry, without the extraordinary aid and protection of government.

But the greatest obstacle of all to the successful prosecution of a new branch of industry in a country in which it was before unknown, consists, as far as the instances apply, in the bounties, premiums, and other aids, which are granted in a variety of cases, by the nations in which the establishments to be imitated are previously introduced. It is well known (and particular examples, in the course of this report, will be cited) that certain nations grant bounties on the exportation of particular commodities, to enable their own workmen to undersell and supplant all competitors, in the countries to which those commodities are sent. Hence the undertakers of a new manufacture have to contend, not only with the natural disadvantages of a new undertaking, but with the gratuities and remunerations which other governments bestow. To be enabled to contend with success, it is evident that the interference and aid of their own governments are indispensable.

Combinations by those engaged in a particular branch of business, in one country, to frustrate the first efforts to introduce it into another, by temporary sacrifices, recompensed, perhaps, by extraordinary indemnifications of the government of such country, are believed to have existed, and are not to be regarded as destitute of probability. The existence or assurance of aid from the government of the country in which the business is to be introduced, may be essential to fortify adventurers against the dread of such combinations; to defeat their efforts, if formed; and to prevent their being formed, by demonstrating that they must in the end prove fruitless.

Whatever room there may be for an expectation, that the industry of a people, under the direction of private interest, will, upon equal terms, find out the most beneficial employment for itself, there is none for a reliance, that it will struggle against the force of unequal terms, or will, of itself, surmount all the adventitious barriers to a successful competition, which may have been erected, either by the advantages naturally acquired from practice, and previous possession of the ground, or by those which may have sprung from positive regulations and an artificial policy. This general reflection might alone suffice as an answer to the objection under examination, exclusively of the weighty considerations which have been particularly urged.

The objections to the pursuit of manufactures in the United States, which next present themselves to discussion, represent an impracticability of success, arising from three causes: scarcity of hands, dearness of labor, want of capital.

The two first circumstances are, to a certain extent, real; and, within due limits, ought to be admitted as obstacles to the success of manufacturing enterprise in the United States. But there are various considerations which lessen their force, and tend to afford an assurance, that they are not sufficient to prevent the advantageous prosecution of many very useful and extensive manufactories.

With regard to scarcity of hands, the fact itself must be applied with no small qualification to certain parts of the United States. There are large districts which may be considered as pretty fully peopled; and which, notwithstanding a continual drain for distant settlement, are thickly interspersed with flourishing and increasing towns. If these districts have not already reached the point at which the complaint of scarcity of hands ceases, they are not remote from it, and are approaching fast towards it; and having, perhaps, fewer attractions to agriculture than some other parts of the Union, they exhibit a proportionably stronger tendency towards other kinds of industry. In these districts may be discerned no inconsiderable maturity for manufacturing establishments.

But there are circumstances, which have been already noticed, with another view, that materially diminish, everywhere, the effect of a scarcity of hands. These circumstances are: The great use which can be made of women and children, on which point as very pregnant and instructive fact has been mentioned—the vast extension given by late improvements to the employment of machines—which, substituting the agency of fire and water, has prodigiously lessened the necessity for manual labor; the employment of persons ordinarily engaged in other occupations, during the seasons or hours of leisure, which, besides giving occasion to the exertion of a greater quantity of labor, by the same number of persons, and thereby increasing the general stock of labor, as has been elsewhere remarked, may also be taken into calculation, as a resource for obviating the scarcity of hands; lastly, the attraction of foreign emigrants. Whoever inspects, with a careful eye, the composition of our towns, will be made sensible to what an extent this resource may be relied upon. This exhibits a large proportion of ingenious and valuable workmen, in different arts and trades, who, by expatriating from Europe, have improved their own condition, and added to the industry and wealth of the United States. It is a natural inference, from the experience we have already had, that, as soon as the United States shall present the countenance of a serious prosecution of manufactures, as soon as foreign artists shall be made sensible that the state of things here affords a moral certainty of employment and encouragement; competent numbers of European workmen will transplant themselves, effectually to ensure the success of the design. How, indeed, can it otherwise happen, considering the various and powerful inducements which the situation of this country offers—addressing themselves to so many strong passions and feelings, to so many general and particular interests.

It may be affirmed, therefore, in respect to hands for carrying on manufactures, that we shall, in a great measure, trade upon a foreign stock, reserving our own for the cultivation of our lands and the manning of our ships, as far as character and circumstances shall incline. It is not unworthy of remark, that the objection to the success of manufactures, deduced from the scarcity of hands, is alike applicable to trade and navigation, and yet these are perceived to flourish, without any sensible impediment from that cause.

As to the dearness of labor, (another of the obstacles alleged) this has relation principally to two circumstances: one, that which has just been discussed, or the scarcity of hands; the other, the greatness of profits.

As far as it is a consequence of the scarcity of hands, it is mitigated by all the considerations which have been adduced as lessening that

deficiency. It is certain, too, that the disparity in this respect, between some of the most manufacturing parts of Europe, and a large proportion of the United States, is not nearly so great as is commonly imagined. It is also much less in regard to artificers and manufacturers, than in regard to country laborers; and while a careful comparison shows that there is, in this particular, much exaggeration; it is also evident, that the effect of the degree of disparity, which does truly exist, is diminished in proportion to the use which can be made of machinery.

To illustrate this last idea, let it be supposed that the difference of price, in two countries, of a given quantity of manual labor, requisite to the fabrication of a given article, is as ten; and that some mechanic power is introduced into both countries, which, performing half the necessary labor, leaves only half to be done by hand; it is evident that the difference in the cost of the fabrication of the article in question, in the two countries, as far as it is connected with the price of labor, will be reduced from ten to five, in consequence of the introduction of that power.

This circumstance is worthy the most particular attention. It diminishes immensely one of the objections most strenuously urged against the success of manufactures in the United States.

To procure all such machines as are known in any part of Europe, can only require a proper provision and due pains. The knowledge of several of the most important of them is already possessed. The preparation of them here is, in most cases, practicable on nearly equal terms. As far as they depend on water, some superiority of advantages may be claimed, from the uncommon variety and greater cheapness of situations adapted to millseats, with which different parts of the United States abound.

So far as the dearness of labor may be a consequence of the greatness of profits in any branch of business, it is no obstacle to its success. The undertaker can afford to pay the price.

There are grounds to conclude, that undertakers of manufactures in this country, can, at this time, afford to pay higher wages to the workmen they may employ, than are paid to similar workmen in Europe. The prices of foreign fabrics, in the market of the United States, which will, for a long time, regulate the prices of domestic ones, may be considered as compounded of the following ingredients: The first cost of materials, including the taxes, if any, which are paid upon them where they are made; the expense of grounds, buildings, machinery, and tools; the wages of the persons employed in the manufactory; the profits on the capital or stock employed; the commissions of agents to purchase them where they are made; the expense of

transportation to the United States, including insurance and other incidental charges; the taxes or duties, if any, and fees of office, which are paid on their exportation; the taxes or duties, and fees of office, which are paid on their importation.

As to the first of these items, the cost of materials, the advantage, upon the whole, is at present on the side of the United States; and the difference in their favor must increase, in proportion as a certain and extensive domestic demand shall induce the proprietors of land to devote more of their attention to the production of these materials. It ought not to escape observation, in a comparison on this point, that some of the principal manufacturing countries of Europe are much more dependent on foreign supply, for the materials of their manufactures, than would be the United States, who are capable of supplying themselves with a greater abundance, as well as a greater variety of the requisite materials.

As to the second item, the expense of grounds, buildings, machinery, and tools, an equality, at least, may be assumed; since advantages, in some particulars, will counterbalance temporary disadvantages in others.

As to the third item, or the article of wages, the comparison certainly turns against the United States; though, as before observed, not in so great a degree as commonly supposed.

The fourth item is alike applicable to the foreign and to the domestic manufacture. It is, indeed, more properly a result than a particular to be compared.

But, with respect to all the remaining items, they are alone applicable to the foreign manufacture, and, in the strictest sense, extraordinary; constituting a sum of extra charge on the foreign fabric, which cannot be estimated at less than from fifteen to thirty per cent. on the cost of it at the manufactory.

This sum of extra charge may confidently be regarded as more than a counterpoise for the real difference in the price of labor; and is a satisfactory proof that manufactures may prosper, in defiance of it, in the United States.

To the general allegation, connected with the circumstances of scarcity of hands and dearness of labor, that extensive manufactures can only grow out of a redundant or full population, it will be sufficient to answer generally, that the fact has been otherwise. That the situation alleged to be an essential condition of success, has not been that of several nations, at periods when they had already attained to maturity in a variety of manufactures.

The supposed want of capital for the prosecution of manufactures

in the United States, is the most indefinite of the objections which are usually opposed to it.

It is very difficult to pronounce any thing precise concerning the real extent of the moneyed capital of a country, and still more, concerning the proportion which it bears to the objects that invite the employment of capital. It is not less difficult to pronounce, how far the effect of any given quantity of money, as capital, or in other words, as a medium for circulating the industry and property of a nation, may be increased by the very circumstance of the additional motion which is given to it, by new objects of employment. The effect, like the momentum of descending bodies, may not improperly be represented as in a compound ratio to mass and velocity. It seems pretty certain, that a given sum of money, in a situation in which the quick impulses of commercial activity were little felt, would appear inadequate to the circulation of as great a quantity of industry and property, as in one in which their full influence was experienced.

It is not obvious why the same objection might not as well be made to external commerce as to manufactures: since it is manifest, that our immense tracts of land, occupied and unoccupied, are capable of giving employment to more capital than is actually bestowed upon them. It is certain that the United States offer a vast field for the advantageous employment of capital; but it does not follow that there will not be found, in one way or another, a sufficient fund for the successful prosecution of any species of industry which is likely to prove truly beneficial.

The following considerations are of a nature to remove all inquietude on the score of want of capital:

The introduction of banks, as has been shown on another occasion, has a powerful tendency to extend the active capital of a country. Experience of the utility of these institutions, is, multiplying them in the United States. It is probable that they will be established wherever they can exist with advantage; and wherever they can be supported, if administered with prudence, they will add new energies to all pecuniary operations.

The aid of foreign capital may safely, and with considerable latitude, be taken into calculation. Its instrumentality has been long experienced in our external commerce; and it has begun to be felt in various other modes. Not only our funds, but our agriculture, and other internal improvements, have been animated by it. It has, already, in a few instances, extended even to our manufactures.

It is a well known fact that there are parts of Europe which have more capital than profitable domestic objects of employment. Hence, among other proofs, the large loans continually furnished to foreign

States. And it is equally certain, that the capital of other parts may find more profitable employment in the United States than at home. And, notwithstanding there are weighty inducements to prefer the employment of capital at home, even at less profit, to an investment of it abroad, though with greater gain, yet these inducements are overruled, either by a deficiency of employment, or by a very material difference in profit. Both these causes operate to produce a transfer of foreign capital to the United States. It is certain, that various objects in this country hold out advantages, which are with difficulty to be equalled elsewhere; and under the increasingly favorable impressions which are entertained of our Government, the attractions will become more and more strong. These impressions will prove a rich mine of prosperity to the country, if they are confirmed and strengthened by the progress of our affairs. And, to secure this advantage, little more is now necessary than to foster industry, and cultivate order and tranquillity at home and abroad.

It is not impossible, that there may be persons disposed to look, with a jealous eye, on the introduction of foreign capital, as if it were an instrument to deprive our own citizens of the profits of our own industry; but, perhaps, there never could be a more unreasonable jealousy. Instead of being viewed as a rival, it ought to be considered as a most valuable auxiliary, conducing to put in motion a greater quantity of productive labor, and a greater portion of useful enterprise, than could exist without it. It is at least evident, that, in a country situated like the United States, with an infinite fund of resources yet to be unfolded, every farthing of foreign capital which is laid out in internal meliorations, and in industrial establishments, of a permanent nature, is a precious acquisition.

And, whatever be the objects which originally attract foreign capital, when once introduced, it may be directed towards any purpose of beneficial exertion which is desired. And to detain it among us, there can be no expedient so effectual, as to enlarge the sphere within which it may be usefully employed: though introduced merely with views to speculations in the funds, it may afterwards be rendered subservient to the interests of agriculture, commerce, and manufactures.

But the attraction of foreign capital for the direct purpose of manufactures, ought not to be deemed a chimerical expectation. There are already examples of it, as remarked in another place. And the examples, if the disposition be cultivated, can hardly fail to multiply. There are, also, instances of another kind, which serve to strengthen the expectation. Enterprises for improving the public communications, by cutting canals, opening the obstructions in rivers,

and erecting bridges, have received very material aid from the same source.

When the manufacturing capitalist of Europe shall advert to the many important advantages which have been intimated in the course of this report, he cannot but perceive very powerful inducements to a transfer of himself and his capital to the United States. Among the reflections which a most interesting peculiarity of situation is calculated to suggest, it cannot escape his observation, as a circumstance of moment in the calculation, that the progressive population and improvement of the United States ensure a continually increasing domestic demand for the fabrics which he shall produce, not to be affected by any external casualties or vicissitudes.

But, while there are circumstances sufficiently strong to authorize a considerable degree of reliance on the aid of foreign capital, towards the attainment of the object in view, it is satisfactory to have good grounds of assurance, that there are domestic resources, of themselves adequate to it. It happens that there is a species of capital, actually existing with the United States, which relieves from all inquietude, on the score of want of capital. This is the funded debt.

The effect of a funded debt, as a species of capital, has been noticed upon a former occasion; but a more particular elucidation of the point seems to be required, by the stress which is here laid upon it. This shall, accordingly, be attempted.

Public funds answer the purpose of capital, from the estimation in which they are usually held by moneyed men; and, consequently, from the ease and despatch with which they can be turned into money. This capacity of prompt convertibility into money, causes a transfer of stock to be, in a great number of cases, equivalent to a payment in coin. And where it does not happen to suit the party who is to receive, to accept a transfer of stock, the party who is to pay is never at a loss to find, elsewhere, a purchaser of his stock, who will furnish him, in lieu of it, with the coin of which he stands in need.

Hence, in a sound and settled state of the public funds, a man possessed of a sum in them, can embrace any scheme of business which offers, with as much confidence as if he were possessed of an equal sum in coin.

This operation of public funds as capital, is too obvious to be denied; but it is objected to the idea of their operating as an augmentation of the capital of the community, that they serve to occasion the destruction of some other capital, to an equal amount.

The capital, which alone they can be supposed to destroy, must consist of—

The annual revenue, which is applied to the payment of interest

on the debt, and to the gradual redemption of the principal; the amount of the coin, which is employed in circulating the funds, or, in other words, in effecting the different alienations which they undergo.

But the following appears to be the true and accurate view of this matter:

1st. As to the point of the annual revenue requisite for payment of interest and redemption of principal.

As a determinate proportion will tend to perspicuity in the reasoning, let it be supposed, that the annual revenue to be applied, corresponding with the modification of the six per cent. stock of the United States, is in the ratio of eight upon the hundred; that is, in the first instance, six on account of interest, and two on account of principal.

Thus far, it is evident, that the capital destroyed, to the capital created, would bear no greater proportion than eight to one hundred. There would be withdrawn, from the total mass of other capitals, a sum of eight dollars to be paid to the public creditor; while he would be possessed of a sum of one hundred dollars, ready to be applied to any purpose, to be embarked in any enterprise which might appear to him eligible. Here, then, the augmentation of capital, or the excess of that which is produced beyond that which is destroyed, is equal to ninety-two dollars.

To this conclusion it may be objected, that the sum of eight dollars is to be withdrawn annually, until the whole hundred is extinguished; and it may be inferred, that, in process of time, a capital will be destroyed equal to that which is at first created.

But it is nevertheless true, that, during the whole of the interval, between the creation of the capital of one hundred dollars, and its reduction to a sum not greater than that of the annual revenue appropriated to its redemption, there will be a greater active capital in existence than if no debt had been contracted. The sum drawn from other capitals in any one year will not exceed eight dollars; but there will be, at every instant of time, during the whole period in question, a sum corresponding with so much of the principal as remains unredeemed, in the hands of some person or other, employed, or ready to be employed, in some profitable undertaking. There will, therefore, constantly be more capital in capacity to be employed, than capital taken from employment. The excess, for the first year, has been stated to be ninety-two dollars; it will diminish yearly; but there will always be an excess, until the principal of the debt is brought to a level with the redeeming annuity; that is, in the case which has been assumed, by way of example, to eight dollars. The reality of this excess becomes palpable, if it be supposed, as often happens, that the citizen of a foreign country imports into the United States one hundred dollars

for the purchase of an equal sum of public debt—here is an absolute augmentation of the mass of circulating coin to the extent of one hundred dollars. At the end of the year, the foreigner is presumed to draw back eight dollars, on account of his principal and interest, but he still leaves ninety-two of his original deposit in circulation, as he, in like manner, leaves eighty-four at the end of the second year, drawing back, then, also, the annuity of eight dollars. And thus the matter proceeds: the capital left in circulation diminishing, in each year, and coming nearer to the level of the annuity drawn back. There are, however, some differences in the ultimate operation of the part of the debt which is purchased by foreigners, and that which remains in the hands of citizens. But the general effect in each case, though in different degrees, is to add to the active capital of the country.

Hitherto, the reasoning has proceeded on a concession of the position, that there is a destruction of some other capital, to the extent of the annuity appropriated to the payment of the interest, and the redemption of the principal of the debt; but in this too much has been conceded. There is, at most, a temporary transfer of some other capital, to the amount of the annuity, from those who pay, to the creditor, who receives; which he again restores to the circulation, to resume the offices of a capital. This he does either immediately, by employing the money in some branch of industry, or mediately, by lending it to some other person, who does so employ it, or by spending it on his own maintenance. In either supposition, there is no destruction of capital; there is nothing more than a suspension of its motion for a time: that is, while it is passing from the hands of those who pay into the public coffers, and thence, through the public creditor, into some other channel of circulation. When the payments of interest are periodical and quick, and made by the instrumentality of banks, the diversion or suspension of capital may almost be denominated momentary. Hence the deduction, on this account, is far less than it at first sight appears to be.

There is, evidently, as far as regards the annuity, no destruction or transfer of any other capital than that portion of the income of each individual which goes to make up the annuity. The land which furnishes the farmer with the sum which he is to contribute, remains the same; and the like may be observed of other capitals. Indeed, as far as the tax, which is the object of contribution (as frequently happens, when it does not oppress by its weight), may have been a motive to greater exertion in any occupation, it may even serve to increase the contributory capital. This idea is not without importance in the general view of the subject.

It remains to see what farther deduction ought to be made from

the capital which is created, by the existence of the debt, on account of the coin which is employed in its circulation. This is susceptible of much less precise calculation than the article which has been just discussed. It is impossible to say what proportion of coin is necessary to carry on the alienations which any species of property usually undergoes. The quantity, indeed, varies according to circumstances. But it may still, without hesitation, be pronounced, from the quickness of the rotation, or, rather, of the transitions, that the medium of circulation always bears but a small proportion to the amount of the property circulated. And it is thence satisfactorily deducible, that the coin employed in the negotiations of the funds, and which serves to give them activity, as capital, is incomparably less than the sum of the debt negotiated for the purpose of business.

It ought not, however, to be omitted, that the negotiation of the funds becomes itself a distinct business, which employs, and, by employing, diverts, a portion of the circulating coin from other pursuits. But, making due allowance for this circumstance, there is no reason to conclude that the effect of the diversion of coin, in the whole operation, bears any considerable proportion to the amount of the capital to which it gives activity. The sum of the debt in circulation is continually at the command of any useful enterprise; the coin itself, which circulates it, is never more than momentarily suspended from its ordinary functions. It experiences an incessant and rapid flux and reflux, to and from the channels of industry, to those of speculations in the funds.

There are strong circumstances in confirmation of this theory. The force of moneyed capital, which has been displayed in Great Britain, and the height to which every species of industry has grown up under it, defy a solution, from the quantity of coin which that kingdom has ever possessed. Accordingly, it has been, coeval with its funding system, the prevailing opinion of the men of business, and of the generality of the most sagacious theorists of that country, that the operation of the public funds, as capital, has contributed to the effect in question. Among ourselves, appearances, thus far, favor the same conclusion. Industry, in general, seems to have been re-animated. There are symptoms indicating an extension of our commerce. Our navigation has certainly, of late, had a considerable spring; and there appears to be, in many parts of the Union, a command of capital, which, till lately, since the Revolution, at least, was unknown. But, it is, at the same time, to be acknowledged, that other circumstances have concurred, (and in a great degree) in producing the present state of things, and that the appearances are not yet sufficiently decisive to be entirely relied upon.

In the question under discussion, it is important to distinguish between an absolute increase of capital, or an accession of real wealth, and an artificial increase of capital, as an engine of business, or as an instrument of industry and commerce. In the first sense, a funded debt has no pretensions to being deemed an increase of capital; in the last, it has pretensions which are not easy to be controverted. Of a similar nature is bank credit; and, in an inferior degree, every species of private credit.

But though a funded debt is not, in the first instance, an absolute increase of capital, or an augmentation of real wealth; yet, by serving as a new power in the operations of industry, it has, within certain bounds, a tendency to increase the real wealth of a community, in like manner, as money, borrowed by a thrifty farmer, to be laid out in the improvement of his farm, may, in the end, add to his stock of real riches.

There are respectable individuals, who, from a just aversion to an accumulation of public debt, are unwilling to concede to it any kind of utility; who can discern no good to alleviate the ill with which they suppose it pregnant; who cannot be persuaded that it ought, in any sense, to be viewed as an increase of capital, lest it should be inferred, that, the more the debt, the more the capital, the greater the burthens, the greater the blessings of the community.

But it interests the public councils to estimate every object as it truly is; to appreciate how far the good, in any measure is compensated by the ill, or the ill by the good: either of them is seldom unmixed.

Neither will it follow that an accumulation of debt is desirable, because a certain degree of it operates as capital. There may be a plethora in the political as in the natural body; there may be a state of things in which any such artificial capital is unnecessary. The debt, too, may be swelled to such a size as that the greatest part of it may cease to be useful as a capital, serving only to pamper the dissipation of idle and dissolute individuals; as that the sums required to pay the interest upon it may become oppressive, and beyond the means which a government can employ, consistently with its tranquillity, to raise them; as that the resources of taxation to face the debt may have been strained too far to admit of extensions adequate to exigencies which regard the public safety.

Where this critical point is, cannot be pronounced; but it is impossible to believe that there is not such a point.

And as the vicissitudes of nations beget a perpetual tendency to the accumulation of debt, there ought to be, in every government, a perpetual, anxious, and unceasing effort to reduce that which at any

time exists, as fast as shall be practicable, consistently with integrity and good faith.

Reasonings on a subject comprehending ideas so abstract and complex, so little reducible to a precise calculation, as those which enter into the question just discussed, are always attended with a danger of running into fallacies. The allowance ought, therefore, to be made for this possibility. But, as far as the nature of the subject admits of it, there appears to be satisfactory ground for a belief that the public funds operate as a resource of capital to the citizens of the United States; and, if they are a resource at all, it is an extensive one.

To all the arguments which are brought to evince the impracticability of success in manufacturing establishments in the United States, it might have been a sufficient answer to have referred to the experience of what has been already done. It is certain that several important branches have grown up and flourished, with a rapidity which surprises, affording an encouraging assurance of success in future attempts. Of these it may not be improper to enumerate the most considerable.

1. *Of Skins.*—Tanned and tawed leather, dressed skins, shoes, boots, and slippers, harness and saddlery of all kinds, portmanteaux and trunks, leather breeches, gloves, muffs and tippets, parchment and glue.

2. *Of Iron.*—Bar and sheet iron, steel, nail rods and nails, implements of husbandry, stoves, pots, and other household utensils, the steel and iron work of carriages, and for ship building, anchors, scale beams and weights, and various tools of artificers, arms of different kinds; though the manufacture of these last has of late diminished for want of a demand.

3. *Of Wood.*—Ships, cabinet wares, and turnery, wool and cotton cards, and other machinery for manufactures and husbandry, mathematical instruments, coopers' wares of every kind.

4. *Of Flax and Hemp.*—Cables, sail cloth, cordage, twine, and pack thread.

5. Bricks and coarse tiles, and potters' wares.

6. Ardent spirits and malt liquors.

7. Writing and printing paper, sheathing and wrapping paper, paste boards, fullers' or press papers, paper hangings.

8. Hats of fur and wool, and mixtures of both; women's stuff and silk shoes.

9. Refined sugars.

10. Oils of animals and seeds, soap, spermaceti and tallow candles.

11. Copper and brass wires, particularly utensils for distillers sugar refiners, and brewers; andirons and other articles for household use, philosophical apparatus.
12. Tin wares for most purposes of ordinary use.
13. Carriages of all kinds.
14. Snuff, chewing and smoking tobacco.
15. Starch and hair-powder.
16. Lampblack and other painters' colors.
17. Gunpowder.

Besides manufactories of these articles, which are carried on as regular trades, and have attained to a considerable degree of maturity, there is a vast scene of household manufacturing, which contributes more largely to the supply of the community than could be imagined, without having made it an object of particular inquiry. This observation is the pleasing result of the investigation to which the subject of this report has led, and is applicable as well to the Southern as to the Middle and Northern States. Great quantities of coarse cloths, coatings, serges, and flannels, linsey woolseys, hosiery of wool, cotton, and thread, coarse fustians, jeans, and muslins, checked and striped cotton and linen goods, bed ticks, coverlets and counterpanes, tow linens, coarse shirtings, sheetings, towelling, and table linen, and various mixtures of wool and cotton, and of cotton and flax, are made in the household way, and, in many instances, to an extent not only sufficient for the supply of the families in which they are made, but for sale, and, even, in some cases, for exportation. It is computed in a number of districts that two-thirds, three-fourths, and even four-fifths, of all the clothing of the inhabitants, are made by themselves. The importance of so great a progress as appears to have been made in family manufactures, within a few years, both in a moral and political view, renders the fact highly interesting.

Neither does the above enumeration comprehend all the articles that are manufactured, as regular trades. Many others occur, which are equally well established, but which, not being of equal importance, have been omitted. And there are many attempts, still in their infancy, which, though attended with very favorable appearances, could not have been properly comprised in an enumeration of manufactories already established. There are other articles, also, of great importance, which, though, strictly speaking, manufactures, are omitted, as being immediately connected with husbandry; such are flour, pot and pearl ashes, pitch, tar, turpentine, and the like.

There remains to be noticed an objection to the encouragement of manufactures, of a nature different from those which question the

probability of success. This is derived from its supposed tendency to give a monopoly of advantages to particular classes, at the expense of the rest of the community, who, it is affirmed, would be able to procure the requisite supplies of manufactured articles on better terms from foreigners than from our own citizens, and who, it is alleged, are reduced to the necessity of paying an enhanced price for whatever they want, by every measure which obstructs the free competition of foreign commodities.

It is not an unreasonable supposition, that measures which serve to abridge the free competition of foreign articles, have a tendency to occasion an enhancement of prices; and it is not to be denied that such is the effect, in a number of cases; but the fact does not uniformly correspond with the theory. A reduction of prices has, in several instances, immediately succeeded the establishment of a domestic manufacture. Whether it be that foreign manufacturers endeavor to supplant, by underselling our own, or whatever else be the cause, the effect has been such as is stated, and the reverse of what might have been expected.

But, though it were true that the immediate and certain effect of regulations controlling the competition of foreign with domestic fabrics, was an increase of price, it is universally true that the contrary is the ultimate effect with every successful manufacture. When a domestic manufacture has attained to perfection, and has engaged in the prosecution of it a competent number of persons, it invariably becomes cheaper. Being free from the heavy charges which attend the importation of foreign commodities, it can be afforded, and accordingly seldom ever fails to be sold, cheaper, in process of time, than was the foreign article for which it is a substitute. The internal competition which takes place, soon does away with everything like monopoly, and by degrees reduces the price of the article to the minimum of a reasonable profit on the capital employed. This accords with the reason of the thing, and with experience.

Whence it follows, that it is the interest of a community, with a view to eventual and permanent economy, to encourage the growth of manufactures. In a national view, a temporary enhancement of price must always be well compensated by a permanent reduction of it.

It is a reflection which may with propriety be indulged here, that this eventual diminution of the prices of manufactured articles, which is the result of internal manufacturing establishments, has a direct and very important tendency to benefit agriculture. It enables the farmer to procure, with a smaller quantity of his labor, the manufactured produce of which he stands in need, and consequently increases the value of his income and property.

The objections which are commonly made to the expediency of encouraging, and to the probability of succeeding in manufacturing pursuits, in the United States, having now been discussed, the considerations, which have appeared in the course of the discussion, recommending that species of industry to the patronage of the Government, will be materially strengthened by a few general, and some particular topics, which have been naturally reserved for subsequent notice.

1. There seems to be a moral certainty that the trade of a country, which is both manufacturing and agricultural, will be more lucrative and prosperous than that of a country which is merely agricultural.

One reason for this is found in that general effort of nations (which has been already mentioned) to procure from their own soils, the articles of prime necessity requisite to their own consumption and use, and which serves to render their demand for a foreign supply of such articles, in a great degree, occasional and contingent. Hence, while the necessities of nations exclusively devoted to agriculture, for the fabrics of manufacturing States, are constant and regular, the wants of the latter for the products of the former are liable to very considerable fluctuations and interruptions. The great inequalities resulting from difference of seasons have been, elsewhere, remarked. This uniformity of demand on one side, and unsteadiness of it on the other, must necessarily have a tendency to cause the general course of the exchange of commodities between the parties, to turn to the disadvantage of the merely agricultural States. Peculiarity of situation, a climate and soil adapted to the production of peculiar commodities, may, sometimes, contradict the rule, but there is every reason to believe that it will be found, in the main, a just one.

Another circumstance, which gives a superiority of commercial advantages to States that manufacture as well as cultivate, consists in the more numerous attractions which a more diversified market offers to foreign customers, and in the greater scope which it affords to mercantile enterprise. It is a position of indisputable truth, in commerce, depending too on very obvious reasons; that the greatest resort will ever be to those marts where commodities, while equally abundant, are most various. Each difference of kind holds out an additional inducement: and it is a position not less clear, that the field of enterprise must be enlarged to the merchants of a country, in proportion to the variety, as well as the abundance of commodities which they find at home, for exportation to foreign markets.

A third circumstance, perhaps not inferior to either of the other two, conferring the superiority which has been stated, has relation to the stagnations of demand for certain commodities, which, at some time or other, interfere more or less with the sale of all. The nation

which can bring to market but few articles is likely to be more quickly and sensibly affected by such stagnations, than one which is always possessed of a great variety of commodities; the former frequently finds too great a proportion of its stock of materials for sale or exchange, lying on hand, or is obliged to make injurious sacrifices to supply its wants of foreign articles, which are numerous and urgent, in proportion to the smallness of the number of its own. The latter commonly finds itself indemnified by the high prices of some articles, for the low prices of others; and the prompt and advantageous sale of those articles which are in demand, enables its merchants the better to wait for a more favorable change in respect to those which are not. There is ground to believe that a difference of situation, in this particular, has immensely different effects upon the wealth and prosperity of nations.

From these circumstances, collectively, two important inferences are to be drawn; one, that there is always a higher probability of a favorable balance of trade, in regard to countries in which manufactures, founded on the basis of a thriving agriculture, flourish, than in regard to those which are confined wholly, or almost wholly, to agriculture; the other, (which is also a consequence of the first) that countries of the former description are likely to possess more pecuniary wealth, or money, than those of the latter.

Facts appear to correspond with this conclusion. The importations of manufactured supplies seem invariably to drain the merely agricultural people of their wealth. Let the situation of the manufacturing countries of Europe be compared, in this particular, with that of countries which only cultivate, and the disparity will be striking. Other causes, it is true, help to account for this disparity between some of them; and among these causes, the relative state of agriculture; but between others of them, the most prominent circumstance of dissimilitude arises from the comparative state of manufactures. In corroboration of the same idea, it ought not to escape remark, that the West India Islands, the soils of which are the most fertile, and the nation which, in the greatest degree, supplies the rest of the world with the precious metals, exchange to a loss, with almost every other country.

As far as experience, at home, may guide, it will lead to the same conclusion. Previous to the Revolution, the quantity of coin possessed by the colonies which now compose the United States, appeared to be inadequate to their circulation; and their debt to Great Britain was progressive. Since the Revolution, the States in which manufactures have most increased have recovered fastest from the injuries of the late war, and abound most in pecuniary resources.

It ought to be admitted, however, in this, as in the preceding case, that causes irrelative to the state of manufactures, account, in a degree, for the phenomena remarked. The continual progress of new settlements has a natural tendency to occasion an unfavorable balance of trade; though it indemnifies for the inconvenience by that increase of the national capital which flows from the conversion of waste into improved lands: and the different degrees of external commerce which are carried on by the different States, may make material differences in the comparative state of their wealth. The first circumstance has reference to the deficiency of coin, and the increase of debt previous to the Revolution; the last, to the advantages which the most manufacturing States appear to have enjoyed over the others, since the termination of the late war.

But the uniform appearance of an abundance of specie, as the concomitant of a flourishing state of manufactures, and of the reverse, where they do not prevail, afford a strong presumption of their favorable operation upon the wealth of a country.

Not only the wealth, but the independence and security of a country, appear to be materially connected with the prosperity of manufactures. Every nation, with a view of these great objects, ought to endeavor to possess within itself, all the essentials of national supply. These comprise the means of subsistence, habitation, clothing, and defence.

The possession of these is necessary to the perfection of the body politic; to the safety as well as to the welfare of the society. The want of either is the want of an important organ of political life and motion; and in the various crises which await a State, it must severely feel the effects of any such deficiency. The extreme embarrassments of the United States, during the late war, from an incapacity of supplying themselves, are still matter of keen recollection; a future war might be expected again to exemplify the mischiefs and dangers of a situation, to which that incapacity is still, in too great a degree, applicable, unless changed by timely and vigorous exertion. To effect this change, as fast as shall be prudent, merits all the attention and all the zeal of our public councils: 'tis the next great work to be accomplished.

The want of a navy, to protect our external commerce, as long as it shall continue, must render it a peculiarly precarious reliance for the supply of essential articles, and must serve to strengthen prodigiously the arguments in favor of manufactures.

To these general considerations are added some of a more particular nature.

Our distance from Europe, the great fountain of manufactured

supply, subjects us, in the existing state of things, to inconvenience and loss, in two ways.

The bulkiness of those commodities, which are the chief productions of the soil, necessarily impose very heavy charges on their transportation to distant markets. These charges, in the cases in which the nations to whom our products are sent, maintain a competition in the supply of their own markets, principally fall upon us, and form material deductions from the primitive value of the articles furnished. The charges on manufactured supplies, brought from Europe, are greatly enhanced by the same circumstances of distance. These charges, again, in the cases in which our own industry maintains no competition in our own markets, also principally fall upon us, and are an additional cause of extraordinary deduction from the primitive value of our own products; these being the materials of exchange for the foreign fabrics which we consume.

The equality and moderation of individual property, and the growing settlements of new districts, occasion, in this country an unusual demand for coarse manufactures; the charges of which being greater in proportion to their greater bulk, augment the disadvantage which has been just described.

As, in most countries, domestic supplies maintain a very considerable competition with such foreign productions of the soil as are imported for sale, if the extensive establishment of manufactories in the United States does not create a similar competition in respect to manufactured articles, it appears to be clearly deducible, from the considerations which have been mentioned, that they must sustain a double loss in their exchanges with foreign nations, strongly conducive to an unfavorable balance of trade, and very prejudicial to their interests.

These disadvantages press, with no small weight, on the landed interest of the country. In seasons of peace, they cause a serious deduction from the intrinsic value of the products of the soil. In the time of a war, which should either involve ourselves, or another nation possessing a considerable share of our carrying trade, the charges on the transportation of our commodities, bulky as most of them are, could hardly fail to prove a grievous burthen to the farmer, while obliged to depend, in so great a degree as he now does, upon foreign markets, for the vent of the surplus of his labor.

As far as the prosperity of the fisheries of the United States is impeded by the want of an adequate market, there arises another special reason for desiring the extension of manufactures. Besides the fish, which, in many places, would be likely to make a part of the subsistence of the persons employed, it is known that the oils, bones, and skins, of marine animals, are of extensive use in various manu-

factures. Hence, the prospect of an additional demand for the produce of the fisheries.

One more point of view only remains, in which to consider the expediency of encouraging manufactures in the United States.

It is not uncommon to meet with an opinion, that, though the promoting of manufactures may be the interest of a part of the Union, it is contrary to that of another part. The Northern and Southern regions are sometimes represented as having adverse interests in this respect. Those are called manufacturing, these agricultural States; and a species of opposition is imagined to subsist between the manufacturing and agricultural interests.

This idea of an opposition between those two interests, is the common error of the early periods of every country; but experience gradually dissipates it. Indeed, they are perceived so often to succor and befriend each other, that they come at length to be considered as one—a supposition which has been frequently abused, and is not universally true. Particular encouragements of particular manufactures may be of a nature to sacrifice the interests of land holders to those of manufacturers; but it is nevertheless a maxim, well established by experience, and generally acknowledged, where there has been sufficient experience, that the aggregate prosperity of manufactures and the aggregate prosperity of agriculture are intimately connected. In the course of the discussion which has had place, various weighty considerations have been adduced, operating in support of that maxim. Perhaps the superior steadiness of the demand of a domestic market, for the surplus of produce of the soil, is, alone, a convincing argument of its truth.

Ideas of a contrariety of interests between the Northern and Southern regions of the Union are, in the main, as unfounded as they are mischievous. The diversity of circumstances, on which such contrariety is usually predicated, authorizes a directly contrary conclusion. Mutual wants constitute one of the strongest links of political connexion, and the extent of these bears a natural proportion to the diversity in the means of mutual supply.

Suggestions of an opposite complexion are ever to be deplored, as unfriendly to the steady pursuit of one great common cause, and to the perfect harmony of all the parts.

In proportion as the mind is accustomed to trace the intimate connexion of interest which subsists between all the parts of a society, united under the same government, the infinite variety of channels will serve to circulate the prosperity of each, to and through the rest—in that proportion will it be little apt to be disturbed by solitudes and apprehensions, which originate in local discriminations.

It is a truth, as important as it is agreeable, and one to which it is not easy to imagine exceptions, that every thing tending to establish substantial and permanent order in the affairs of a country, to increase the total mass of industry and opulence, is ultimately beneficial to every part of it. On the credit of this great truth, an acquiescence may safely be accorded, from every quarter, to all institutions and arrangements which promise a confirmation of public order and an augmentation of national resource.

But there are more particular considerations which serve to fortify the idea that the encouragement of manufactures is the interest of all parts of the Union. If the Northern and Middle States should be the principal scenes of such establishments, they would immediately benefit the more Southern, by creating a demand for productions, some of which they have in common with the other States, and others, which are either peculiar to them, or more abundant, or of better quality, than elsewhere. These productions, principally, are timber, flax, hemp, cotton, wool, raw silk, indigo, iron, lead, furs, hides, skins, and coals; of these articles, cotton and indigo are peculiar to the Southern States, as are, hitherto, lead and coal; flax and hemp are, or maybe, raised in greater abundance there, than in the more Northern States; and the wool of Virginia is said to be of better quality than that of any other State—a circumstance rendered the more probable, by the reflection, that Virginia embraces the same latitudes with the finest wool countries of Europe. The climate of the South is also better adapted to the production of silk.

The extensive cultivation of cotton, can, perhaps, hardly be expected but from the previous establishment of domestic manufactories of the article; and the surest encouragement and vent for the others, would result from similar establishments in respect to them.

If, then, it satisfactorily appears, that it is the interest of the United States, generally, to encourage manufactures, it merits particular attention, that there are circumstances which render the present a critical moment for entering, with zeal, upon the important business. The effort cannot fail to be materially seconded by a considerable and increasing influx of money, in consequence of foreign speculations in the funds, and by the disorders which exist in different parts of Europe.

The first circumstance not only facilitates the execution of manufacturing enterprises, but it indicates them as a necessary mean to turn the thing itself to advantage, and to prevent its being eventually an evil. If useful employment be not found for the money of foreigners, brought to the country to be invested in purchases of the public debt, it will quickly be re-exported, to defray the expense of an ex-

traordinary consumption of foreign luxuries; and distressing drains of our specie may, hereafter, be experienced, to pay the interest and redeem the principal of the purchased debt.

This useful employment, too, ought to be of a nature to produce solid and permanent improvements. If the money merely serves to give a temporary spring to foreign commerce; as it cannot procure new and lasting outlets for the products of the country, there will be no real or durable advantage gained. As far as it shall find its way in agricultural meliorations, in opening canals, and similar improvements, it will be productive of substantial utility. But there is reason to doubt, whether, in such channels, it is likely to find sufficient employment; and still more, whether many of those who possess it would be as readily attracted to objects of this nature, as to manufacturing pursuits, which bear greater analogy to those to which they are accustomed, and to the spirit generated by them.

To open the one field, as well as the other, will at least secure a better prospect of useful employment for whatever accession of money there has been or may be.

There is, at the present juncture, a certain fermentation of mind, a certain activity of speculation and enterprise, which, if properly directed, may be made subservient to useful purposes; but, which, if left entirely to itself, may be attended with pernicious effects.

The disturbed state of Europe inclining its citizens to emigration, the requisite workmen will be more easily acquired than at another time; and the effect of multiplying the opportunities of employment to those who emigrate, may be an increase of the number and extent of valuable acquisitions to the population, arts, and industry, of the country.

To find pleasure in the calamities of other nations would be criminal; but to benefit ourselves, by opening an asylum to those who suffer in consequence of them, is as justifiable as it is politic.

A full view having now been taken of the inducements to the promotion of manufactures in the United States, accompanied with an examination of the principal objections which are commonly urged in opposition, it is proper, in the next place, to consider the means by which it may be effected, as introductory to a specification of the objects, which, in the present state of things, appear the most fit to be encouraged, and of the particular measures which it may be advisable to adopt, in respect to each.

In order to a better judgment of the means proper to be resorted to by the United States, it will be of use to advert to those which have been employed with success in other countries. The principal of these are:

1. *Protecting duties — or duties on those foreign articles which are the rivals of the domestic ones intended to be encouraged.*

Duties of this nature evidently amount to a virtual bounty on the domestic fabrics; since, by enhancing the charges on foreign fabrics, they enable the national manufacturers to undersell all their foreign competitors. The propriety of this species of encouragement need not be dwelt upon, as it is not only a clear result from the numerous topics which have been suggested, but is sanctioned by the laws of the United States, in a variety of instances; it has the additional recommendation of being a resource of revenue. Indeed, all the duties imposed on imported articles, though with an exclusive view to revenue, have the effect, in contemplation, and, except where they fall on raw materials, wear a beneficent aspect toward the manufactures of the country.

2. *Prohibitions of rival articles, or duties equivalent to prohibitions.*

This is another and efficacious mean of encouraging national manufactures; but, in general, it is only fit to be employed when a manufacture has made such progress, and is in so many hands, as to ensure a due competition, and an adequate supply on reasonable terms. Of duties equivalent to prohibitions, there are examples in the laws of the United States; and there are other cases, to which the principle may be advantageously extended, but they are not numerous.

Considering a monopoly of the domestic market to its own manufacturers as the reigning policy of manufacturing nations, a similar policy, on the part of the United States, in every proper instance, is dictated, it might almost be said, by the principles of distributive justice; certainly, by the duty of endeavoring to secure to their own citizens a reciprocity of advantages.

3. *Prohibitions of the exportation of the materials of manufactures.*

The desire of securing a cheap and plentiful supply for the national workmen, and where the article is either peculiar to the country, or of peculiar quality there, the jealousy of enabling foreign workmen to rival those of the nation with its own materials, are the leading motives to this species of regulation. It ought not to be affirmed, that it is in no instance proper; but is, certainly, one which ought to be adopted with great circumspection, and only in very plain cases. It is seen at once, that its immediate operation is to abridge the demand,

and keep down the price of the produce of some other branch of industry—generally speaking, of agriculture—to the prejudice of those who carry it on; and though, if it be really essential to the prosperity of any very important national manufacture, it may happen that those who are injured, in the first instance, may be, eventually, indemnified by the superior steadiness of an extensive domestic market, depending on that prosperity; yet, in a matter in which there is so much room for nice and difficult combinations, in which such opposite considerations combat each other, prudence seems to dictate that the expedient in question ought to be indulged with a sparing hand.

4. *Pecuniary bounties.*

This has been found one of the most efficacious means of encouraging manufactures, and is, in some views, the best. Though it has not yet been practised upon by the Government of the United States, (unless the allowance on the exportation of dried and pickled fish and salted meat could be considered as a bounty) and though it is less favored by public opinion than some other modes, its advantages are these:

1. It is a species of encouragement more positive and direct than any other, and, for that very reason, has a more immediate tendency to stimulate and uphold new enterprises, increasing the chances of profit, and diminishing the risk of loss, in the first attempts.

2. It avoids the inconvenience of a temporary augmentation of price, which is incident to some other modes; or it produces it to a less degree, either by making no addition to the charges on the rival foreign article, as in the case of protecting duties, or by making a smaller addition. The first happens when the fund for the bounty is derived from a different object, (which may or may not increase the price of some other article, according to the nature of that object) the second, when the fund is derived from the same, or a similar object, of foreign manufacture. One per cent. duty on the foreign article, converted into a bounty on the domestic, will have an equal effect with a duty of two per cent., exclusive of such bounty; and the price of the foreign commodity is liable to be raised, in the one case, in the proportion of one per cent.; in the other in that of two per cent. Indeed the bounty, when drawn from another source, is calculated to promote a reduction of price; because, without laying any new charge on the foreign article, it serves to introduce a competition with it, and to increase the total quantity of the article in the market.

3. Bounties have not, like high protecting duties, a tendency to produce scarcity. An increase of price is not always the immediate,

though, where the progress of a domestic manufacture does not counteract a rise, it is, commonly, the ultimate effect of an additional duty. In the interval between the laying of the duty and the proportional increase of price, it may discourage importation, by interfering with the profits to be expected from the sale of the article.

4. Bounties are, sometimes, not only the best, but the only proper expedient for uniting the encouragement of a new object of agriculture with that of a new object of manufacture. It is the interest of the farmer to have the production of the raw material promoted by counteracting the interference of the foreign material of the same kind. It is the interest of the manufacturer to have the material abundant and cheap. If, prior to the domestic production of the material, in sufficient quantity to supply the manufacturer on good terms, a duty be laid upon the importation of it from abroad, with a view to promote the raising of it at home, the interest both of the farmer and manufacturer will be disserved. By either destroying the requisite supply, or raising the price of the article beyond what can be afforded to be given for it by the conductor of an infant manufacture, it is abandoned or fails, and there being no domestic manufactories to create a demand for the raw material, which is raised by the farmer, it is in vain that the competition of the like foreign article may have been destroyed.

It cannot escape notice, that a duty upon the importation of an article can no otherwise aid the domestic production of it, than by giving the latter greater advantages in the home market. It can have no influence upon the advantageous sale of the article produced in foreign markets—no tendency, therefore, to promote its exportation.

The true way to conciliate these two interests is to lay a duty on foreign manufactures of the material, the growth of which is desired to be encouraged, and to apply the produce of that duty, by way of bounty, either upon the production of the material itself, or upon its manufacture at home, or upon both. In this disposition of the thing, the manufacturer commences his enterprise under every advantage which is attainable, as to quantity or price of the raw material; and the farmer, if the bounty be immediately to him, is enabled by it to enter into a successful competition with the foreign material. If the bounty be to the manufacturer, on so much of the domestic material as he consumes, the operation is nearly the same; he has a motive of interest to prefer the domestic commodity, if of equal quality, even at a higher price than the foreign, so long as the difference of price is anything short of the bounty which is allowed upon the article.

Except the simple and ordinary kinds of household manufacture, or those for which there are very commanding local advantages,

pecuniary bounties are, in most cases, indispensable to the introduction of a new branch. A stimulus and a support, not less powerful and direct, is, generally speaking, essential to the overcoming of the obstacles which arise from the competitions of superior skill and maturity elsewhere. Bounties are especially essential in regard to articles upon which those foreigners, who have been accustomed to supply a country, are in the practice of granting them.

The continuance of bounties on manufactures long established, must almost always be of questionable policy: because a presumption would arise, in every such case, that there were natural and inherent impediments to success. But, in new undertakings, they are as justifiable as they are oftentimes necessary.

There is a degree of prejudice against bounties, from an appearance of giving away the public money without an immediate consideration, and from a supposition that they serve to enrich particular classes, at the expense of the community.

But neither of these sources of dislike will bear a serious examination. There is no purpose to which public money can be more beneficially applied, than to the acquisition of a new and useful branch of industry; no consideration more valuable, than a permanent addition to the general stock of productive labor.

As to the second source of objection, it equally lies against other modes of encouragement, which are admitted to be eligible. As often as a duty upon a foreign article makes an addition to its price, it causes an extra expense to the community, for the benefit of the domestic manufacturer. A bounty does no more. But it is the interest of the society, in each case, to submit to the temporary expense—which is more than compensated by an increase of industry and wealth; by an augmentation of resources and independence; and by the circumstances of eventual cheapness which has been noticed in another place.

It would deserve attention, however, in the employment of this species of encouragement in the United States, as a reason for moderating the degree of it in the instances in which it might be deemed eligible, that the great distance of this country from Europe imposes very heavy charges on all the fabrics which are brought from thence, amounting to from fifteen to thirty per cent. on their value, according to their bulk.

A question has been made concerning the constitutional right of the Government of the United States to apply this species of encouragement; but there is certainly no good foundation for such a question. The National Legislature has express authority "to lay and collect taxes, duties, imposts, and excises, to pay the debts, and provide for

the common defence and general welfare," with no other qualifications than that "all duties, imposts, and excises, shall be uniform throughout the United States; and that no capitation or other direct tax shall be laid, unless in proportion to numbers, ascertained by a census or enumeration, taken on the principles prescribed in the Constitution," and that "no tax or duty shall be laid on articles exported from any State."

These three qualifications excepted, the power to raise money is plenary and indefinite, and the objects to which it may be appropriated are no less comprehensive than the payment of the public debts, and the providing for the common defence and general welfare. The terms "general welfare" were doubtless intended to signify more than was expressed or imported in those which preceded; otherwise, numerous exigencies incident to the affairs of a nation would have been left without a provision. The phrase is as comprehensive as any that could have been used; because it was not fit that the constitutional authority of the Union to appropriate its revenues should have been restricted within narrower limits than the "general welfare"; and because this necessarily embraces a vast variety of particulars, which are susceptible neither of specification nor of definition.

It is, therefore, of necessity, left to the discretion of the National Legislature to pronounce upon the objects which concern the general welfare, and for which, under that description, an appropriation of money is requisite and proper. And there seems to be no room for a doubt, that whatever concerns the general interests of learning, of agriculture, of manufactures, and of commerce, are within the sphere of the national councils, as far as regards an application of money.

The only qualification of the generality of the phrase in question, which seems to be admissible, is this: That the object, to which an appropriation of money is to be made, be general, and not local; its operation extending, in fact, or by possibility, throughout the Union, and not being confined to a particular spot.

No objection ought to arise to this construction, from a supposition that it would imply a power to do whatever else should appear to Congress conducive to the general welfare. A power to appropriate money with this latitude, which is granted, too, in express terms, would not carry a power to do any other thing not authorized in the Constitution, either expressly or by fair implication.

5. *Premiums.*

These are of nature allied to bounties, though distinguishable from them in some important features.

Bounties are applicable to the whole quantity of an article pro-

duced, or manufactured, or exported, and involved a correspondent expense. Premiums serve to reward some particular excellence or superiority, some extraordinary exertion or skill, and are dispensed only in a small number of cases. But their effect is to stimulate general effort; contrived so as to be both honorary and lucrative, they address themselves to different passions—touching the chords, as well of emulation as of interest. They are, accordingly, a very economical mean of exciting the enterprise of a whole community.

There are various societies, in different countries, whose object is the dispensation of premiums for the encouragement of agriculture, arts, manufactures, and commerce; and though they are, for the most part, voluntary associations, with comparatively slender funds, their utility has been immense. Much has been done, by this mean, in Great Britain. Scotland, in particular, owes, materially to it, a prodigious amelioration of condition. From a similar establishment in the United States, supplied and supported by the Government of the Union, vast benefits might, reasonably be expected. Some further ideas, on this head, shall, accordingly, be submitted, in the conclusion of this report.

6. The exemption of the materials of manufactures from duty.

The policy of that exemption, as a general rule, particularly in reference to new establishments, is obvious. It can hardly ever be advisable to add the obstructions of fiscal burthens to the difficulties which naturally embarrass a new manufacture; and where it is matured, and in condition to become an object of revenue, it is, generally speaking, better that the fabric, than the material, should be the subject of taxation. Ideas of proportion between the quantum of the tax and the value of the article, can be more easily adjusted in the former than in the latter case. An argument for exemptions of this kind, in the United States, is to be derived from the practice, as far as their necessities have permitted, of those nations whom we are to meet as competitors in our own and in foreign markets.

There are, however, exceptions to it, of which some examples will be given under the next head.

The laws of the Union afford instances of the observance of the policy here recommended, but it will probably be found advisable to extend it to some other cases. Of a nature, bearing some affinity to that policy, is the regulation, which exempts from duty the tools and implements, as well as the books, clothes, and household furniture, of foreign artists who come to reside in the United States—an advan-

tage already secured to them by the laws of the Union, and which it is, in every view, proper to continue.

7. Drawbacks of the duties which are imposed on the materials of manufactures.

It has already been observed, as a general rule, that duties on those materials ought, with certain exceptions, to be forborne. Of these exceptions, three cases occur, which may serve as examples. One, where the material is itself an object of general or extensive consumption, and a fit and productive source of revenue. Another, where a manufacture of a simpler kind, the competition of which, with a like domestic article, is desired to be restrained, partakes of the nature of a raw material, from being capable, by a further process, to be converted into a manufacture of a different kind, the introduction or growth of which is desired to be encouraged. A third, where the material itself is a production of the country, and in sufficient abundance to furnish a cheap and plentiful supply to the national manufacturers.

Under the first description comes the article of molasses. It is not only a fair object of revenue, but, being a sweet, it is just that the consumers of it should pay a duty as well as the consumers of sugar.

Cottons and linens, in their white state, fall under the second description. A duty upon such as are imported is proper, to promote the domestic manufacture of similar articles, in the same State. A drawback of that duty is proper, to encourage the printing and staining, at home, of those which are brought from abroad. When the first of these manufactures has attained sufficient maturity in a country to furnish a full supply for the second, the utility of the drawback ceases.

The article of hemp either now does, or may be expected soon to, exemplify the third case in the United States.

Where duties on the materials of manufactures are not laid for the purpose of preventing a competition with some domestic production, the same reasons which recommend, as a general rule, the exemption of those materials from duties, would recommend, as a like general rule, the allowance of drawbacks in favor of the manufacturer. Accordingly, such drawbacks are familiar in countries which systematically pursue the business of manufactures; which furnishes an argument for the observance of a similar policy in the United States; and the idea has been adopted by the laws of the Union, in the instances of salt and molasses. It is believed that it will be found advantageous to extend it to some other articles.

8. *The encouragement of new inventions and discoveries at home, and of the introduction into the United States of such as may have been made in other countries; particularly, those which relate to machinery.*

This is among the most useful and unexceptionable of the aids which can be given to manufactures. The usual means of that encouragement are pecuniary rewards, and, for a time, exclusive privileges. The first must be employed, according to the occasion, and the utility of the invention or discovery. For the last, so far as respects "authors and inventors", provision has been made by law. But it is desirable, in regard to improvements, and secrets of extraordinary value, to be able to extend the same benefit to introducers, as well as authors and inventors; a policy which has been practised with advantage in other countries. Here, however, as in some other cases, there is cause to regret, that the competency of the authority of the National Government to the good which might be done, is not without a question. Many aids might be given to industry, many internal improvements of primary magnitude might be promoted, by an authority operating throughout the Union, which cannot be effected as well, if at all, by an authority confined within the limits of a single State.

But, if the legislature of the Union cannot do all the good that might be wished, it is, at least, desirable that all may be done which is practicable. Means for promoting the introduction of foreign improvements, though less efficaciously than might be accomplished with more adequate authority, will form a part of the plan intended to be submitted in the close of this report.

It is customary with manufacturing nations to prohibit, under severe penalties, the exportation of implements and machines, which they have either invented or improved. There are already objects for a similar regulation in the United States; and others may be expected to occur, from time to time. The adoption of it seems to be dictated by the principle of reciprocity. Greater liberality, in such respects, might better comport with the general spirit of the country; but a selfish and exclusive policy, in other quarters, will not always permit the free indulgence of a spirit which would place us upon an unequal footing. As far as prohibitions tend to prevent foreign competitors from deriving the benefit of the improvements made at home, they tend to increase the advantages of those by whom they may have been introduced, and operate as an encouragement to exertion.

9. *Judicious regulations for the inspection of manufactured commodities.*

This is not among the least important of the means by which the prosperity of manufactures may be promoted. It is, indeed, in many cases, one of the most essential. Contributing to prevent frauds upon consumers at home, and exporters to foreign countries; to improve the quality, and preserve the character of the national manufactures; it cannot fail to aid the expeditious and advantageous sale of them, and to serve as a guard against successful competition from other quarters. The reputation of the flour and lumber of some States, and of the pot ash of others, has been established by an attention to this point. And the like good name might be procured for those articles, wheresoever produced, by a judicious and uniform system of inspection, throughout the ports of the United States. A like system might also be extended with advantage to other commodities.

10. *The facilitating of pecuniary remittances from place to place—*

Is a point of considerable moment to trade in general, and to manufactures in particular, by rendering more easy the purchase of raw materials and provisions, and the payment for manufactured supplies. A general circulation of bank paper, which is to be expected from the institution lately established, will be a most valuable mean to this end. But much good would also accrue from some additional provisions respecting inland bills of exchange. If those drawn in one State, payable in another, were made negotiable every where, and interest and damages allowed in case of protest, it would greatly promote negotiations between the citizens of different States, by rendering them more secure, and with it the convenience and advantage of the merchants and manufacturers of each.

11. *The facilitating of the transportation of commodities.*

Improvements favoring this object intimately concern all the domestic interests of a community; but they may, without impropriety, be mentioned as having an important relation to manufactures. There is, perhaps, scarcely any thing which has been better calculated to assist the manufactures of Great Britain, than the melioration of the public roads of that kingdom, and the great progress which has been of late made in opening canals. Of the former, the United States stand much in need; for the latter, they present uncommon facilities.

The symptoms of attention to the improvement of inland navigation which have lately appeared in some quarters, must fill with

pleasure every breast, warmed with a true zeal for the prosperity of the country. These examples, it is to be hoped, will stimulate the exertions of the Government and citizens of every State. There can certainly be no object more worthy of the cares of the local administrations; and it were to be wished that there was no doubt of the power of the National Government to lend its direct aid on a comprehensive plan. This is one of those improvements which could be prosecuted with more efficacy by the whole, than by any part or parts of the Union. There are cases in which the general interest will be in danger to be sacrificed to the collision of some supposed local interests. Jealousies, in matters of this kind, are as apt to exist, as they are apt to be erroneous.

The following remarks are sufficiently judicious and pertinent to deserve a literal quotation:

“Good roads, canals, and navigable rivers, by diminishing the expense of carriage, put the remote parts of a country more nearly upon a level with those in the neighborhood of the town. They are, upon that account, the greatest of all improvements. They encourage the cultivation of the remote, which must always be the most extensive circle of the country. They are advantageous to the town, by breaking down the monopoly of the country in its neighborhood. They are advantageous even to that part of the country. Though they introduce some rival commodities into the old market, they open many new markets to its produce. Monopoly, besides, is a great enemy to good management, which can never be universally established, but in consequence of that free and universal competition, which forces every body to have recourse to it for the sake of self-defence. It is not more than fifty years ago that some of the counties in the neighborhood of London petitioned the parliament against the extension of the turnpike roads into the remoter counties. Those remoter counties, they pretended, from the cheapness of labor, would be able to sell their grass and corn cheaper in the London market than themselves, and they would thereby reduce their rents, and ruin their cultivation. Their rents, however, have risen, and their cultivation has improved since that time.”

Specimens of a spirit similar to that which governed the counties here spoken of, present themselves too frequently to the eye of an impartial observer, and render it a wish of patriotism, that the body in this country, in whose councils a local or partial spirit is least likely to predominate, were at liberty to pursue and promote the general interest, in those instances in which there might be danger of the interference of such a spirit.

The foregoing are the principal of the means by which the growth

of manufactures is ordinarily promoted. It is, however, not merely necessary that the measures of government, which have a direct view to manufactures, should be calculated to assist and protect them, but that those which only collaterally affect them in the general course of the administration, should be guarded from any peculiar tendency to injure them.

There are certain species of taxes, which are apt to be oppressive to different parts of the community, and, among other ill effects, have a very unfriendly aspect toward manufactures. All poll or capitation taxes are of this nature. They either proceed according to a fixed rate, which operates unequally and injuriously to the industrious poor, or they vest a discretion, in certain officers, to make estimates and assessments, which are necessarily vague, conjectural, and liable to abuse. They ought, therefore, to be abstained from in all but cases of distressing emergency.

All such taxes (including all taxes on occupations) which proceed according to the amount of capital supposed to be employed in a business, or of profits supposed to be made in it, are unavoidably hurtful to industry. It is in vain that the evil may be endeavored to be mitigated, by leaving it, in the first instance, in the option of the party to be taxed, to declare the amount of his capital or profits.

Men engaged in any trade or business have commonly weighty reasons to avoid disclosures, which would expose, with anything like accuracy, the real state of their affairs. They most frequently find it better to risk oppression, than to avail themselves of so inconvenient a refuge, and the consequence is, that they often suffer oppression.

When the disclosure, too, if made, is not definite, but controllable by the discretion, or, in other words, by the passions and prejudices of the revenue officers, it is not only an ineffectual protection, but the possibility of its being so, is an additional reason for not resorting to it.

Allowing to the public officers the most equitable dispositions, yet, where they are to exercise a discretion without certain data, they cannot fail to be often misled by appearances. The quantity of business which seems to be going on, is, in a vast number of cases, a very deceitful criterion of the profits which are made; yet it is, perhaps, the best they can have, and it is the one on which they will most naturally rely. A business, therefore, which may rather require aid from the Government, than be in a capacity to be contributory to it, may find itself crushed by the mistaken conjectures of the assessors of taxes.

Arbitrary taxes, under which denomination are comprised all those that leave the quantum of the tax to be raised on each person to the discretion of certain officers, are as contrary to the genius of liberty as to the maxims of industry. In this light they have been viewed

by the most judicious observers on Government, who have bestowed upon them the severest epithets of reprobation, as constituting one of the worst features usually to be met with in the practice of despotic governments.

It is certain, at least, that such taxes are particularly inimical to the success of manufacturing industry, and ought carefully to be avoided by a government which desires to promote it.

The great copiousness of the subject of this report has insensibly led to a more lengthy preliminary discussion than was originally contemplated or intended. It appeared proper to investigate principles, to consider objections, and to endeavor to establish the utility of the thing proposed to be encouraged, previous to a specification of the objects which might occur, as meriting or requiring encouragement, and of the measures which might be proper in respect to each. The first purpose having been fulfilled, it remains to pursue the second.

In the selection of objects, five circumstances seem entitled to particular attention. The capacity of the country to furnish the raw material; the degree in which the nature of the manufacture admits of a substitute for manual labor in machinery; the facility of execution; the extensiveness of the uses to which the article can be applied; its subserviency to other interests, particularly the great one of national defence. There are, however, objects to which these circumstances are little applicable, which, for some special reasons, may have a claim to encouragement.

A designation of the principal raw material of which each manufacture is composed, will serve to introduce the remarks upon it; as, in the first place,

IRON.

The manufactures of this article are entitled to pre-eminent rank. None are more essential in their kinds, nor so extensive in their uses. They constitute, in whole or in part, the implements or the materials, or both, of almost every useful occupation. Their instrumentality is every where conspicuous.

It is fortunate for the United States that they have peculiar advantages for deriving the full benefit of this most valuable material, and they have every motive to improve it with systematic care. It is to be found in various parts of the United States, in great abundance, and of almost every quality; and fuel, the chief instrument in manufacturing it, is both cheap and plenty. This particularly applies to charcoal; but there are productive coal mines already in operation, and strong indications that the material is to be found in abundance, in a variety of other places.

The inquiries to which the subject of this report has led, have been answered with proofs that manufactories of iron, though generally understood to be extensive, are far more so than is commonly supposed. The kinds in which the greatest progress has been made, have been mentioned in another place, and need not be repeated; but there is little doubt that every other kind, with due cultivation, will rapidly succeed. It is worthy of remark, that several of the particular trades of which it is the basis, are capable of being carried on without the aid of large capitals.

Iron-works have greatly increased in the United States, and are prosecuted with much more advantage than formerly. The average price, before the Revolution, was about sixty-four dollars per ton; at present, it is about eighty—a rise which is chiefly to be attributed to the increase of manufactures of the material.

The still further extension and multiplication of such manufactures will have the double effect of promoting the extraction of the metal itself, and of converting it to a greater number of profitable purposes.

Those manufactures, too, unite, in a greater degree than almost any others, the several requisites which have been mentioned as proper to be consulted in the selection of objects.

The only further encouragement of manufactories of this article, the propriety of which may be considered as unquestionable, seems to be an increase of the duties on foreign rival commodities.

Steel is a branch which has already made considerable progress, and it is ascertained that some new enterprises, on a more extensive scale, have been lately set on foot. The facility of carrying it to an extent which will supply all internal demands, and furnish a considerable surplus for exportation, cannot be doubted. The duty upon the importation of this article, which is, at present, seventy-five cents per cwt. may, it is conceived, be safely and advantageously extended to one hundred cents. It is desirable, by decisive arrangements, to second the efforts which are making in so very valuable a branch.

The United States, already, in a great measure, supply themselves with nails and spikes. They are able, and ought certainly, to do it entirely. The first and most laborious operation, in this manufacture, is performed by water-mills; and of the persons afterwards employed, a great proportion are boys, whose early habits of industry are of importance to the community, to the present support of their families, and to their own future comfort. It is not less curious than true, that, in certain parts of the country, the making of nails is an occasional family manufacture.

The expediency of an additional duty on these articles is indicated by an important fact. About one million eight hundred thousand

pounds of them were imported into the United States, in the course of a year, ending the 30th of September, 1790. A duty of two cents per pound would, it is presumable, speedily put an end to so considerable an importation. And it is, in every view, proper that an end should be put to it.

The manufacture of these articles, like that of some others, suffers from the carelessness and dishonesty of a part of those who carry it on. An inspection in certain cases might tend to correct the evil. It will deserve consideration whether a regulation of this sort cannot be applied, without inconvenience, to the exportation of the articles, either to foreign countries, or from one State to another.

The implements of husbandry are made in several States in great abundance. In many places, it is done by the common blacksmiths. And there is no doubt that an ample supply for the whole country, can, with great ease, be procured among ourselves.

Various kinds of edged tools for the use of mechanics are also made; and a considerable quantity of hollow wares, though the business of castings has not yet attained the perfection which might be wished. It is, however, improving, and as there are respectable capitals, in good hands, embarked in the prosecution of those branches of iron manufactories which are yet in their infancy, they may all be contemplated as objects not difficult to be acquired.

To ensure the end it seems equally safe and prudent to extend the duty, *ad valorem*, upon all manufactures of iron, or of which iron is the article of chief value, to ten per cent.

Fire-arms and other military weapons, may, it is conceived, be placed, without inconvenience, in the class of articles rated at fifteen per cent. There are, already, manufactories of these articles, which only require the stimulus of a certain demand to render them adequate to the supply of the United States.

It would, also, be a material aid to manufactures of this nature, as well as a means of public security, if provision should be made for an annual purchase of military weapons, of home manufacture, to a certain determinate extent, in order to the formation of arsenals; and to replace, from time to time, such as should be drawn for use, so as always to have in store the quantity of each kind which should be deemed a competent supply.

But it may, hereafter, deserve legislative consideration, whether manufactories of all the necessary weapons of war ought not to be established, on account of the government itself. Such establishments are agreeable to the usual practice of nations, and that practice seems founded on sufficient reason.

There appears to be an improvidence in leaving these essential

implements of national defence to the casual speculations of individual adventure—a resource which can less be relied upon, in this case, than in most others; the articles in question not being objects of ordinary and indispensable private consumption or use. As a general rule, manufactories on the immediate account of government are to be avoided; but this seems to be one of the few exceptions which that rule admits, depending on very special reasons.

Manufacturers of steel, generally, or of which steel is the article of chief value, may, with advantage, be placed in the class of goods rated at seven and a half per cent. As manufactures of this kind have not yet made any considerable progress, it is a reason for not rating them as high as those of iron; but as this material is the basis of them, and as their extension is not less practicable than important, it is desirable to promote it by a somewhat higher duty than the present.

A question arises, how far it might be expedient to permit the importation of iron, in pigs and bars, free from duty. It would certainly be favorable to manufactures of the article; but the doubt is, whether it might not interfere with its production.

Two circumstances, however, abate, if they do not remove apprehension on this score; one is, the considerable increase of price which has been already remarked, and which renders it probable that the free admission of foreign iron would not be inconsistent with an adequate profit to the proprietors of iron-works; the other is the augmentation of demand which would be likely to attend the increase of manufactures of the article, in consequence of the additional encouragements proposed to be given. But caution, nevertheless, in a matter of this kind, is most advisable. The measure suggested ought, perhaps, rather to be contemplated subject to the lights of further experience, than immediately adopted.

COPPER.

The manufactures of which this article is susceptible, are, also, of great extent and utility. Under this description, those of brass, of which it is the principal ingredient, are intended to be included.

The material is a natural production of the country. Mines of copper have actually been wrought, and with profit to the undertakers, though it is not known that any are now in this condition. And nothing is easier than the introduction of it from other countries, on moderate terms and in great plenty.

Coppersmiths and brass founders, particularly the former, are numerous in the United States; some of whom carry on business to a respectable extent.

To multiply and extend manufactories of the materials in question, is worthy of attention and effort. In order to this, it is desirable to facilitate a plentiful supply of the materials; and a proper mean to this end is, to place them in the class of free articles. Copper, in plates, and brass, are already in this predicament; but copper, in pigs and bars, is not; neither is lapis calaminaris; which, together with copper and charcoal, constitute the component ingredients of brass. The exemption from duty, by parity of reason, ought to embrace all such of these articles as are objects of importation.

An additional duty on brass wares will tend to the general end in view. These now stand at five per cent., while those of tin, pewter, and copper, are rated at seven and a half. There appears to be a propriety, in every view, in placing brass wares on the same level with them; and it merits consideration, whether the duty upon all of them ought not to be raised to ten per cent.

LEAD.

There are numerous proofs that this material abounds in the United States, and requires little to unfold it to an extent more than equal to every domestic occasion. A prolific mine of it has long been open in the south-western parts of Virginia, and under a public administration, during the late war, yielded a considerable supply for military use. This is now in the hands of individuals, who not only carry it on with spirit, but have established manufactories of it at Richmond, in the same State.

The duties already laid upon the importation of this article, either in its unmanufactured or manufactured state, ensure it a decisive advantage in the home market, which amounts to considerable encouragement. If the duty on pewter wares should be raised, it would afford a further encouragement. Nothing else occurs as proper to be added.

FOSSIL COAL.

This, as an important instrument of manufactures, may, without impropriety, be mentioned among the subjects of this report.

A copious supply of it would be of great consequence to the iron branch. As an article of household fuel, also, it is an interesting production, the utility of which must increase in proportion to the decrease of wood, by the progress of settlement and cultivation. And its importance to navigation, as an immense article of transportation coastwise, is signally exemplified in Great Britain.

It is known that there are several coal mines in Virginia, now

worked; and appearances of their existence are familiar in a number of places.

The expediency of a bounty on all this species of coal, of home production, and of premiums on the opening of new mines, under certain qualifications, appears to be worthy of particular examination. The great importance of the article will amply justify a reasonable expense in this way, if it shall appear to be necessary to, and shall be thought likely to, answer the end.

WOOD.

Several manufactures of this article flourish in the United States. Ships are no where built in greater perfection, and cabinet wares generally, are made little, if at all, inferior to those of Europe. Their extent is such as to have admitted of considerable exportation.

An exemption from duty, of the several kinds of wood ordinarily used in these manufactures, seems to be all that is requisite, by way of encouragement. It is recommended by the consideration of a similar policy being pursued in other countries, and by the expediency of giving equal advantages to our own workmen in wood. The abundance of timber, proper for ship building in the United States, does not appear to be any objection to it. The increasing scarcity, and growing importance of that article, in the European countries, admonish the United States to commence, and systematically to pursue, measures for the preservation of their stock. Whatever may promote the regular establishment of magazines of ship timber, is in various views desirable.

SKINS.

There are scarcely any manufactories of greater importance than of this article. Their direct and happy influence upon agriculture, by promoting the raising of cattle of different kinds, is a very material recommendation.

It is pleasing, too, to observe the extensive progress they have made in their principal branches, which are so far matured as almost to defy foreign competition. Tanneries, in particular, are not only carried on as a regular business, in numerous instances, and in various parts of the country, but they constitute, in some places, a valuable item of incidental family manufactures.

Representations, however, have been made, importing the expediency of further encouragement to the leather branch, in two ways: one by increasing the duty on the manufactures of it, which are imported: the other, by prohibiting the exportation of bark. In support

of the latter, it is alleged, that the price of bark, chiefly in consequence of large exportations, has risen, within a few years, from about three dollars to four and a half per cord.

These suggestions are submitted, rather as intimations which merit consideration, than as matters the propriety of which is manifest. It is not clear that an increase of duty is necessary; and in regard to the prohibitions desired, there is no evidence of any considerable exportation hitherto; and it is most probable that, whatever augmentation of price may have taken place, is to be attributed to an extension of the home demand, from the increase of manufactures, and to a decrease of the supply, in consequence of the progress of settlement, rather than to the quantities which have been exported.

It is mentioned, however, as an additional reason for the prohibition, that one species of the bark usually exported, is in some sort peculiar to the country, and the material of a very valuable dye, of great use in some other manufactures, in which the United States have begun a competition.

There may also be this argument in favor of an increase of duty. The object is of importance enough to claim decisive encouragement, and the progress which has been made, leaves no room to apprehend any inconvenience on the score of supply, from such an increase.

It would be of benefit to this branch, if glue, which is now rated at five per cent., were made the object of an excluding duty. It is already made, in large quantities, at various tanneries, and, like paper, is an entire economy of materials, which, if not manufactured, would be left to perish. It may be placed, with advantage, in the class of articles paying fifteen per cent.

GRAIN.

Manufactures of the several species of this article have a title to peculiar favor; not only because they are, most of them, immediately connected with the subsistence of the citizens, but because they enlarge the demand for the most precious products of the soil.

Though flour may with propriety be noticed as a manufacture of grain, it were useless to do it, but for the purpose of submitting the expediency of a general system of inspection throughout the ports of the United States; which, if established upon proper principles, would be likely to improve the quality of our flour every where, and to raise its reputation in foreign markets. There are, however, considerations which stand in the way of such an arrangement.

Ardent spirits and malt liquors are, next to flour, the two principal manufactures of grain. The first has made a very extensive, the last a

considerable progress in the United States. In respect to both, an exclusive possession of the home market ought to be secured to the domestic manufacturers, as fast as circumstances will admit. Nothing is more practicable, and nothing more desirable.

The existing laws of the United States have done much towards attaining this valuable object; but some additions to the present duties on foreign distilled spirits and foreign malt liquors, and perhaps an abatement of those on home made spirits, would more effectually secure it; and there does not occur any very weighty objection to either.

An augmentation of the duties on imported spirits would favor, as well the distillation of spirits from molasses, as that from grain; and to secure to the nation the benefit of a manufacture, even of foreign materials, is always of great, though perhaps of secondary importance.

A strong impression prevails in the minds of those concerned in distilleries, (including, too, the most candid and enlightened) that greater differences in the rates of duty on foreign and domestic spirits are necessary, completely to secure the successful manufacture of the latter, and there are facts which entitle this impression to attention.

It is known that the price of molasses, for some years past, has been successively rising in the West India markets, owing partly to a competition which did not formerly exist, and partly to an extension of demand in this country; and it is evident that the late disturbances in those islands, from which we draw our principal supply, must so far interfere with the production of the article, as to occasion a material enhancement in price. The destruction and devastation attendant on the insurrection in Hispaniola, in particular, must not only contribute very much to that effect, but may be expected to give it some duration. These circumstances, and the duty of three cents per gallon on molasses, may render it difficult for the distillers of that material to maintain, with adequate profit, a competition with the rum brought from the West Indies, the quality of which is so considerably superior.

The consumption of geneva, or gin, in this country, is extensive. It is not long since distilleries of it have grown up among us to any importance. They are now becoming of consequence, but being still in their infancy, they require protection.

It is represented that the price of some of the materials is greater here, than in Holland, from which place large quantities are brought; the price of labor considerably greater; capitals engaged in the business there, much larger than those which are employed here; the rate of profits at which the undertakers can afford to carry it on, much less; the prejudices in favor of imported gin strong. These circumstances

are alleged to outweigh the charges which attend the bringing of the article from Europe to the United States, and the present difference of duty, so as to obstruct the prosecution of the manufacture with due advantage.

Experiment could, perhaps, alone decide, with certainty, the justness of the suggestions which are made; but, in relation to branches of manufacture so important, it would seem inexpedient to hazard an unfavorable issue, and better to err on the side of too great, than of too small a difference in the particular in question.

It is, therefore, submitted, that an addition of two cents per gallon be made to the duty on imported spirits of the first class of proof, with a proportionable increase on those of higher proof; and that a deduction of one cent per gallon be made from the duty on spirits distilled within the United States, beginning with the first class of proof, and a proportionable deduction from the duty on those of higher proof.

It is ascertained that by far the greatest part of the malt liquors consumed in the United States, are the produce of domestic breweries. It is desirable, and in all likelihood attainable, that the whole consumption should be supplied by ourselves.

The malt liquors at home, though inferior to the best, are equal to a great part of those which have been usually imported. The progress already made is an earnest of what may be accomplished. The growing competition is an assurance of improvement. This will be accelerated by measures tending to invite a greater capital into this channel of employment.

To render the encouragement of domestic breweries decisive, it may be advisable to substitute to the present rates of duty, eight cents per gallon, generally; and it will deserve to be considered as a guard against evasions, whether there ought not to be a prohibition of their importation, except in casks of considerable capacity. It is to be hoped, that such a duty would banish from the market foreign malt liquors of inferior quality, and that the best kind only would continue to be imported, till it should be supplanted by the efforts of equal skill or care at home.

Till that period, the importation, so qualified, would be an useful stimulus to improvement, and, in the mean time, the payment of the increased price for the enjoyment of a luxury, in order to the encouragement of a most useful branch of domestic industry, could not reasonably be deemed a hardship.

As a further aid to manufactures of grain, though upon a smaller scale, the articles of starch, hair-powder, and wafers, may with great propriety be placed among those which are rated at fifteen per cent. No manufactures are more simple, nor more completely within the

reach of a full supply from domestic sources; and it is a policy as common as it is obvious, to make them the objects either of prohibitory duties or of express prohibition.

FLAX AND HEMP.

Manufactures of these articles have so much affinity to each other, and they are so often blended, that they may, with advantage, be considered in conjunction. The importance of the linen branch to agriculture, its precious effects upon household industry, the ease with which the materials can be produced at home, to any requisite extent, the great advances which have been already made in the coarser fabrics of them, especially in the family way, constitute claims of peculiar force to the patronage of government.

This patronage may be afforded in various ways; by promoting the growth of the materials, by increasing the impediments to an advantageous competition of rival foreign articles, by direct bounties, or premiums upon the home manufactures.

1st. As to promoting the growth of the materials.

In respect to hemp, something has been already done, by the high duty upon foreign hemp. If the facilities for domestic production were not unusually great, the policy of the duty on the foreign raw material would be highly questionable, as interfering with the growth or manufactures of it. But making the proper allowances for those facilities, and with an eye to the future and natural progress of the country, the measure does not appear, upon the whole, exceptionable.

A strong wish naturally suggests itself, that some method could be devised, of affording a more direct encouragement to the growth both of flax and hemp; such as would be effectual, and, at the same time, not attended with too great inconveniences. To this end, bounties and premiums offer themselves to consideration, but no modification of them has yet occurred, which would not either hazard too much expense, or operate unequally, in reference to the circumstances of different parts of the Union; and which would not be attended with very great difficulties in the execution.

Secondly. As to increasing the impediments to an advantageous competition of rival foreign articles.

To this purpose, an augmentation of the duties on importation is the obvious expedient, which, in regard to certain articles, appears to be recommended by sufficient reasons.

The principal of these articles is sail-cloth—one intimately connected with navigation and defence; and of which, a flourishing manufactory is established at Boston, and very promising ones at several other places.

It is presumed to be both safe and advisable to place this in the class of articles rated at ten per cent. A strong reason for it results from the consideration, that a bounty of two pence sterling, per ell, is allowed in great Britain, upon the exportation of the sail-cloth manufactured in that kingdom.

It would likewise appear to be good policy to raise the duty to seven and a half per cent on the following articles: Drillings, osnaburgs, ticklenburgs, dowlas, canvass, brown rolls, bagging, and upon all other linens, the first cost of which, at the place of exportation, does not exceed thirty-five cents per yard. A bounty of twelve and a half per cent. upon an average, on the exportation of such or similar linens from Great Britain, encourages the manufacture of them in that country, and increases the obstacles to a successful competition in the countries to which they are sent.

The quantities of tow and other household linens, manufactured in different parts of the United States, and the expectations which are derived from some late experiments, of being able to extend the use of labor-saving machines, in the coarser fabrics of linen, obviate the danger of inconvenience from an increase of the duty upon such articles, and authorize a hope of speedy and complete success to the endeavors which may be used for procuring an internal supply.

Thirdly. As to direct bounties or premiums upon the manufactured articles.

To afford more effectual encouragement to the manufacture, and at the same time to promote the cheapness of the article, for the benefit of navigation, it will be of great use to allow a bounty of two cents per yard on all sail-cloth which is made in the United States, from materials of their own growth. This would also assist the culture of those materials. An encouragement of this kind, if adopted, ought to be established for a moderate term of years, to invite to new undertakings, and to an extension of the old. This is an article of importance enough to warrant the employment of extraordinary means in its favor.

COTTON.

There is something in the texture of this material, which adapts it, in a peculiar degree, to the application of machines. The signal utility of the mill for spinning of cotton, not long since invented in England, has been noticed in another place; but there are other machines, scarcely inferior in utility, which, in the different manufactories of this article, are employed, either exclusively, or with more than ordinary effect. This very important circumstance recommends

the fabrics of cotton, in a more particular manner, to a country in which a defect of hands constitutes the greatest obstacle to success.

The variety and extent of the uses to which the manufactures of this article are applicable, is another powerful argument in their favor.

And the faculty of the United States to produce the raw material in abundance, and of a quality which, though alleged to be inferior to some that is produced in other quarters, is nevertheless capable of being used with advantage in many fabrics, and is probably susceptible of being carried by a more experienced culture, to much greater perfection, suggests an additional and a very cogent inducement to the vigorous pursuit of the cotton branch, in its several subdivisions.

How much has been already done, has been stated in a preceding part of this report.

In addition to this, it may be announced, that a society is forming, with a capital which is expected to be extended to at least half a million of dollars, on behalf of which, measures are already in train for prosecuting, on a large scale, the making and printing of cotton goods.

These circumstances conspire to indicate the expediency of removing any obstructions which may happen to exist, to the advantageous prosecution of the manufactories in question, and of adding such encouragements as may appear necessary and proper.

The present duty of three cents per pound on the foreign raw material, is undoubtedly a very serious impediment to the progress of those manufactories.

The injurious tendency of similar duties, either prior to the establishment, or in the infancy of the domestic manufacture of the article, as it regards the manufacture, and their worse than inutility, in relation to the home production of the material itself, have been anticipated, particularly in discussing the subject of pecuniary bounties.

Cotton has not the same pretensions with hemp, to form an exception to the general rule.

Not being, like hemp, a universal production of the country, it affords less assurance of an adequate internal supply; but the chief objection arises from the doubts which are entertained, concerning the quality of the national cotton. It is alleged that the fibre of it is considerably shorter and weaker, than that of some other places; and it has been observed, as a general rule, that the nearer the place of growth to the equator, the better the quality of the cotton. That which comes from Cayenne, Surinam, and Demarara, is said to be preferable, even at a material difference of price, to the cotton of the islands.

While a hope may reasonably be indulged, that, with due care and attention, the national cotton may be made to approach nearer than it now does to that of regions somewhat more favored by climate; and while facts authorize an opinion that very great use may be made of it, and that it is a resource which gives greater security to the cotton fabrics of this country, than can be enjoyed by any which depends wholly on external supply, it will certainly be wise, in every view, to let our infant manufactures have the full benefit of the best materials, on the cheapest terms. It is obvious that the necessity of having such materials is proportioned to the unskillfulness and inexperience of the workmen employed, who, if inexpert, will not fail to commit great waste, where the materials they are to work with are of an indifferent kind.

To secure to the national manufacturers so essential an advantage, a repeal of the present duty on imported cotton is indispensable.

A substitute for this, far more encouraging to domestic production, will be to grant a bounty on the national cotton, when wrought at a home manufactory; to which a bounty on the exportation of it may be added. Either, or both, would do much more towards promoting the growth of the article, than the merely nominal encouragement, which it is proposed to abolish. The first would also have a direct influence in encouraging the manufacture.

The bounty which has been mentioned, as existing in Great Britain, upon the exportation of coarse linens, not exceeding a certain value, applies also to certain descriptions of cotton goods of similar value.

This furnishes an additional argument for allowing to the national manufactures the species of encouragement just suggested, and, indeed, for adding some other aid.

One cent per yard, not less than of a given width, on all goods of cotton, or of cotton and linen mixed, which are manufactured in the United States, with the addition of one cent. per pound weight of the material, if made of national cotton, would amount to an aid of considerable importance, both to the production and to the manufacture of that valuable article. And it is conceived that the expense would be well justified by the magnitude of the object.

The printing and staining of cotton goods is known to be a distinct business from the fabrication of them. It is one easily accomplished, and which, as it adds materially to the value of the article in its white state, and prepares it for a variety of new uses, is of importance to be promoted.

As imported cottons, equally with those which are made at home, may be the objects of this manufacture, it will merit consideration, whether the whole, or a part of the duty, on the white goods, ought

not to be allowed to be drawn back in favor of those who print or stain them. This measure would certainly operate as a powerful encouragement to the business; and though it may, in a degree, counteract the original fabrication of the articles, it would probably more than compensate for this disadvantage, in the rapid growth of a collateral branch, which is of a nature sooner to attain to maturity. When a sufficient progress shall have been made, the drawback may be abrogated, and by that time the domestic supply of the articles to be printed or stained will have been extended.

If the duty of seven and a half per cent. on certain kinds of cotton goods, were extended to all goods of cotton, or of which it is the principal material, it would probably more than counterbalance the effect of the drawback proposed, in relation to the fabrication of the article. And no material objection occurs to such an extension. The duty, then, considering all the circumstances which attend goods of this description, could not be deemed inconveniently high; and it may be inferred, from various causes, that the prices of them would still continue moderate.

Manufactories of cotton goods, not long since established at Beverly, in Massachusetts, and at Providence, in the State of Rhode Island, and conducted with a perseverance corresponding with the patriotic motives which began them, seem to have overcome the first obstacles to success; producing corduroys, velverets, fustians, jeans, and other similar articles, of a quality which will bear a comparison with the like articles brought from Manchester. The one at Providence has the merit of being the first introducing into the United States the celebrated cotton mill, which not only furnishes materials for that manufactory itself, but for the supply of private families, for household manufacture.

Other manufactories of the same material, as regular businesses, have also been begun at different places in the State of Connecticut, but all upon a smaller scale than those above-mentioned. Some essays are also making in the printing and staining of cotton goods. There are several small establishments of this kind, already on foot.

WOOL.

In a country, the climate of which partakes of so considerable a proportion of winter, as that of a great part of the United States, the woollen branch cannot be regarded as inferior to any, which relates to the clothing of the inhabitants.

Household manufactures of this material are carried on in different parts of the United States, to a very interesting extent; but there is

only one branch, which, as a regular business, can be said to have acquired maturity. This is the making of hats.

Hats of wool, and of wool mixed with fur, are made in large quantities, in different States; and nothing seems wanting, but an adequate supply of materials, to render the manufacture commensurate with the demand.

A promising essay, towards the fabrication of cloths, cassimeres, and other woollen goods, is likewise going on at Hartford, in Connecticut. Specimens of the different kinds which are made, in the possession of the Secretary, evince that these fabrics have attained a very considerable degree of perfection. Their quality certainly surpasses anything that could have been looked for in so short a time, and under so great disadvantages; and conspires, with the scantiness of the means, which have been at the command of the directors, to form the eulogium of that public spirit, perseverance, and judgment, which have been able to accomplish so much.

To cherish and bring to maturity this precious embryo, must engage the most ardent wishes, and proportionable regret, as far as the means of doing it may appear difficult or uncertain.

Measures, which should tend to promote an abundant supply of wool, of good quality, would probably afford the most efficacious aid that present circumstances permit.

To encourage the raising and improving the breed of sheep, at home, would certainly be the most desirable expedient for that purpose; but it may not be alone sufficient, especially as it is, yet, a problem, whether our wool be capable of such a degree of improvement as to render it fit for the finer fabrics.

Premiums would probably be found the best means of promoting the domestic, and bounties the foreign supply. The first may be within the compass of the institution, hereafter to be submitted. The last would require a specific legislative provision. If any bounties are granted, they ought, of course, to be adjusted with an eye to quality as well as quantity.

A fund for the purpose may be derived from the addition of two and a half per cent. to the present rate of duty on carpets and carpeting; an increase to which the nature of the articles suggests no objections, and which may, at the same time, furnish a motive the more to the fabrication of them at home, towards which some beginnings have been made.

SILK.

The production of this article is attended with great facility in most parts of the United States. Some pleasing essays are making in Connecticut, as well towards that, as towards the manufacture of what is

produced. Stockings, handkerchiefs, ribbons, and buttons, are made, though as yet but in small quantities.

A manufactory of lace, upon a scale not very extensive, has been long memorable at Ipswich, in the State of Massachusetts.

An exemption of the material from the duty which it now pays on importation, and premiums upon the production to be dispensed under the direction of the institution before alluded to, seem to be the only species of encouragement advisable at so early a stage of the thing.

GLASS.

The materials for making glass are found every where. In the United States there is no deficiency of them. The sands and stones called *tarso*, which include flinty and crystalline substances generally, and the salts of various plants, particularly of the sea-weed, kali, or kelp, constitute the essential ingredients. An extraordinary abundance of fuel is a particular advantage enjoyed by this country for such manufactures. They, however, require large capitals, and involve much manual labor.

Different manufactories of glass are now on foot in the United States. The present duty of twelve and a half per cent. on all imported articles of glass, amounts to a considerable encouragement to those manufactories. If anything in addition is judged eligible, the most proper would appear to be a direct bounty on window-glass and black bottles.

The first recommends itself as an object of general convenience; the last adds to that character the circumstance of being an important item in breweries. A complaint is made of great deficiency in this respect.

GUNPOWDER.

No small progress has been, of late, made in the manufacture of this very important article. It may, indeed, be considered as already established; but its high importance renders its further extension very desirable.

The encouragement which it already enjoys, are a duty of ten per cent. on the foreign rival article, and an exemption of saltpetre, one of the principal ingredients of which it is composed, from duty. A like exemption of sulphur, another cheap ingredient, would appear to be equally proper. No quantity of this article has, yet, been produced from internal sources. The use made of it in finishing the bottoms of ships, is an additional inducement to placing it in the class of free goods. Regulations for the careful inspection of the article, would have a favorable tendency.

PAPER.

Manufactories of paper are among those which are arrived at the greatest maturity in the United States, and are most adequate to national supply. That of paper-hangings, is a branch in which respectable progress has been made.

Nothing material seems wanting to the further success of this valuable branch, which is already protected by a competent duty on similar imported articles.

In the enumeration of the several kinds made subject to that duty, sheathing and cartridge paper have been omitted. These being the most simple manufactures of the sort, and necessary to military supply, as well as ship-building, recommend themselves equally with those of other descriptions, to encouragement, and appear to be as fully within the compass of domestic exertions.

PRINTED BOOKS.

The great number of presses disseminated throughout the Union, seem to afford an assurance, that there is no need of being indebted to foreign countries for the printing of the books which are used in the United States. A duty of ten per cent., instead of five, which is now charged upon the article, would have a tendency to aid the business internally.

It occurs as an objection to this, that it may have an unfavorable aspect toward literature, by raising the prices of books in universal use in private families, schools, and other seminaries of learning. But the difference, it is conceived, would be without effect.

As to books which usually fill the libraries of the wealthier classes, and of professional men, such an augmentation of prices as might be occasioned by an additional duty of five per cent., would be too little felt to be an impediment to the acquisition.

And with regard to books which may be specially imported for the use of particular seminaries of learning, and of public libraries, a total exemption from duty would be advisable, which would go far towards obviating the objection just mentioned. They are now subject to a duty of five per cent.

As to the books in most general family use, the constancy and universality of the demand, would ensure exertions to furnish them at home, and the means are completely adequate. It may also be expected ultimately, in this, as in other cases, that the extension of the domestic manufacture would conduce to the cheapness of the article.

It ought not to pass unremarked, that, to encourage the printing of books, is to encourage the manufacture of paper.

REFINED SUGARS AND CHOCOLATE

Are among the number of extensive and prosperous domestic manufactures.

Drawbacks of the duties upon the materials of which they are respectively made, in cases of exportation, would have a beneficial influence upon the manufacture, and would conform to a precedent which has been already furnished in the instance of molasses, on the exportation of distilled spirits.

Cocoa, the raw material, now pays a duty of one cent per pound, while chocolate, which is a prevailing and very simple manufacture, is comprised in the mass of articles rated at no more than five per cent.

There would appear to be a propriety in encouraging the manufacture by a somewhat higher duty on its foreign rival, than is paid on the raw material. Two cents per pound on imported chocolate, would, it is presumed, be without inconvenience.

The foregoing heads comprise the most important of the several kinds of manufactures which have occurred as requiring, and, at the same time, as most proper for public encouragement; and such measures for affording it as have appeared best calculated to answer the end, have been suggested.

The observations which have accompanied this delineation of objects, supersede the necessity of many supplementary remarks. One or two, however, may not be altogether superfluous.

Bounties are, in various instances, proposed as one species of encouragement.

It is a familiar objection to them, that they are difficult to be managed, and liable to frauds. But neither that difficulty nor this danger seems sufficiently great to countervail the advantages of which they are productive, when rightly applied. And it is presumed to have been shown, that they are, in some cases, particularly in the infancy of new enterprises, indispensable.

It will, however, be necessary to guard, with extraordinary circumspection, the manner of dispensing them. The requisite precautions have been thought of, but to enter into the detail would swell this report, already voluminous, to a size too inconvenient.

If the principle shall not be deemed inadmissible, the means of avoiding an abuse of it will not be likely to present insurmountable obstacles. There are useful guides from practice in other quarters.

It shall, therefore, only be remarked here, in relation to this point, that any bounty which may be applied to the manufacture of an article, cannot, with safety, extend beyond those manufactories at which the making of the article is a regular trade. It would be impos-

sible to annex adequate precautions to a benefit of that nature, if extended to every private family in which the manufacture was incidentally carried on; and, being a merely incidental occupation, which engages a portion of time that would otherwise be lost, it can be advantageously carried on without so special an aid.

The possibility of a diminution of the revenue may also present itself as an objection to the arrangements which have been submitted.

But there is no truth which may be more firmly relied upon, than that the interests of the revenue are promoted by whatever promotes an increase of national industry and wealth.

In proportion to the degree of these, is the capacity of every country to contribute to the public treasury; and where the capacity to pay is increased, or even is not decreased, the only consequence of measures which diminish any particular resource, is a change of the object. If, by encouraging the manufacture of an article at home, the revenue which has been wont to accrue from its importation should be lessened, an indemnification can easily be found, either out of the manufacture itself, or from some other object which may be deemed more convenient.

The measures, however, which have been submitted, taken aggregately, will, for a long time to come, rather augment than decrease the public revenue.

There is little room to hope, that the progress of manufactures will so equally keep pace with the progress of population, as to prevent even a gradual augmentation of the product of the duties on imported articles.

As, nevertheless, an abolition in some instances, and a reduction in others, of duties which have been pledged for the public debt, is proposed, it is essential that it should be accompanied with a competent substitute. In order to this, it is requisite that all the additional duties which shall be laid, be appropriated, in the first instance, to replace all defalcations which may proceed from any such abolition or diminution. It is evident, at first glance, that they will not only be adequate to this, but will yield a considerable surplus. This surplus will serve—

First. To constitute a fund for paying the bounties which shall have been decreed.

Secondly. To constitute a fund for the operations of a board to be established, for promoting arts, agriculture, manufactures, and commerce. Of this institution, different intimations have been given in the course of this report. An outline of a plan for it shall now be submitted.

Let a certain annual sum be set apart, and placed under the

management of commissioners, not less than three, to consist of certain officers of the Government and their successors in office.

Let these commissioners be empowered to apply the fund confided to them, to defray the expenses of the emigration of artists, and manufacturers in particular branches of extraordinary importance; to induce the prosecution and introduction of useful discoveries, inventions, and improvements, by proportionate rewards, judiciously held out and applied; to encourage by premiums, both honorable and lucrative, the exertions of individuals and of classes, in relation to the several objects they are charged with promoting; and to afford such other aids to those objects as may be generally designated by law.

The commissioners to render to the Legislature an annual account of their transactions and disbursements; and all such sums as shall not have been applied to the purposes of their trust, at the end of every three years, to revert to the treasury. It may, also, be enjoined upon them not to draw out the money, but for the purpose of some specific disbursement.

It may, moreover, be of use to authorize them to receive voluntary contributions, making it their duty to apply them to the particular objects for which they may have been made, if any shall have been designated by the donors.

There is reason to believe that the progress of particular manufactures has been much retarded by the want of skilful workmen. And it often happens, that the capitals employed are not equal to the purposes of bringing from abroad workmen of a superior kind. Here, in cases worthy of it, the auxiliary agency of Government would, in all probability, be useful. There are also valuable workmen in every branch, who are prevented from emigrating, solely, by the want of means. Occasional aids to such persons, properly administered, might be a source of valuable acquisitions to the country.

The propriety of stimulating by rewards the invention and introduction of useful improvements, is admitted without difficulty. But the success of attempts in this way, must evidently depend much on the manner of conducting them. It is probable that the placing of the dispensation of those rewards under some proper discretionary direction, where they may be accompanied by collateral expedients, will serve to give them the surest efficacy. It seems impracticable to apportion, by general rules, specific compensations for discoveries of unknown and disproportionate utility.

The great use which may be made of a fund of this nature, to procure and import foreign improvements, is particularly obvious. Among these, the article of machines would form a most important item.

The operation and utility of premiums have been adverted to, together with the advantages which have resulted from their dispensation, under the direction of certain public and private societies. Of this, some experience has been had in the instance of the Pennsylvania Society for the promotion of manufactures and useful arts; but the funds of that association have been too contracted to produce more than a very small portion of the good to which the principles of it would have led. It may confidently be affirmed, that there is scarcely any thing which has been devised, better calculated to excite a general spirit of improvement, than the institutions of this nature. They are truly invaluable.

In countries where there is great private wealth, much may be effected by the voluntary contributions of patriotic individuals; but in a community situated like that of the United States, the public purse must supply the deficiency of private resource. In what can it be so useful, as in prompting and improving the efforts of industry?

All of which is humbly submitted.

ALEXANDER HAMILTON,
Secretary of the Treasury.

Appendix

Appendix

Position in the Hamilton Papers, as arranged by the
Library of Congress, where the documents reproduced
above may be found.

LETTERS CONCERNED DIRECTLY WITH HAMILTON'S REPORT ON MANUFACTURES

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